

# MARINE RECORD

ESTABLISHED 1878.

VOL. XXIII, No. 6.

CLEVELAND---FEBRUARY 8, 1900---CHICAGO.

\$2.00 Per Year. 5c. Single Copy

## LAKE CARRIERS' ASSOCIATION.

To consider and take action upon all general questions relating to the navigation and carrying business of the Great Lakes, maintain necessary shipping offices and in general to protect the common interests of Lake Carriers, and improve the character of the service rendered to the public.

<b>PRESIDENT.</b>	
W. C. FARRINGTON,	Buffalo.
<b>1ST VICE-PRESIDENT.</b>	
CAPT. J. G. KEITH,	Chicago.
<b>SECRETARY.</b>	
CHARLES H. KEEP,	Buffalo.
<b>TREASURER.</b>	
GEORGE P. MCKAY,	Cleveland.
<b>COUNSEL.</b>	
HARVEY D. GOULDER,	Cleveland.
<b>EXECUTIVE AND FINANCE COMMITTEE.</b>	
JAMES CORRIGAN, Chairman,	Cleveland.
<b>COMMITTEE ON LEGISLATION.</b>	
GIBSON L. DOUGLAS, Chairman,	Buffalo.
<b>COMMITTEE ON AIDS TO NAVIGATION.</b>	
GEORGE P. MCKAY, Chairman,	Cleveland.

### THE OTHER SIDE OF THE QUESTION.

President J. J. Hill of the Great Northern Railway addressed the Grain Growers' Convention, at Fargo, on Friday, the 26th ult, on the subject of creating new markets for our wheat. Mr. Hill is always an original thinker, and certainly this address opens up a subject that is of the very greatest interest to the Northwest, and that is the enhancement of the selling price of wheat, not by artificial means, but a stable and permanent advance.

The substance of his remarks along this line were, that it is simply a question of furnishing the transportation at a reasonable price, and we take it that he means that the demand will keep ahead of any possible increase of shipping facilities.

Incidentally he throws a new light on the ship subsidy bill at Washington. Without a doubt the country as a whole believes that the subsidy bill is designed to help American shipping in general, but Mr. Hill shows how very easy it will be for a score or less of Atlantic greyhounds to absorb the entire annual appropriation of \$9,000,000 contemplated by the bill.

Quoting from his remarks on this subject it seems that there is another condition in this bill. They give for ships of fourteen knots speed a bonus on the measurement out and back, a bonus of one cent a ton for each 100 miles. For ships of twenty-one knots they give 23 cents. It is a well established fact the world over that the cheapest carriers are the low speed vessels. Take the Lucania and the Campania, with engines of 30,000 horse-power and a speed of twenty-one knots. Horse-power of 7,500 would drive them fourteen knots—one fourth of the power and two-thirds the speed. It is the last knot that costs the money. A ship with a speed of twenty-one knots, while her measured capacity may be 15,000 tons, couldn't possibly carry 3,500 tons of your agricultural products. And still under that bill she would get an average bonus out and back of about \$1,000 a day.

Now, if the bonus was paid on outgoing commodities, products raised in our country, certified out under a customs certificate and certified into a foreign country under a consular certificate, we could afford to pay for what had found a new market. It is unfair to pay for a tonnage we could not use.

If this bill passes—and it may be made the business of a party to pass it—I hope not—it will prove the worst delusion and snare ever offered. The money can all be absorbed by fifteen or twenty Atlantic greyhounds. The next time I ask

you to consider the extension of your markets by providing means to carry your products to market—and I expect to keep at it until something is accomplished—you will say that it has been tried and failed. It will not be tried under the present bill. It will pay on the measurement of the ship. The ship may never carry a pound of your product and yet draw a bonus for its full measured capacity.

Of course there still remains in this country a large element that cannot get over the fact that because a railroad president is advocating this subject it must be from selfish interests, and consequently none of theirs. Happily, the thought of the country is expanding, and this question of the wheat price is one deserving, in fact demanding, the very best efforts of everyone living in the Mississippi Valley, the merchant as well as the wheat farmer.

### TO IMPROVE THE ERIE CANAL.

Gov. Roosevelt, of New York, recommends the expenditure of \$60,000,000 in improving and enlarging the Erie canal, so as to make it navigable for barges of 1,000 tons. The New York Commerce Commission estimates that if this is done freight can be transported upon the canal for about one-third the cost by rail. It is proposed that New York City, the chief beneficiary, shall pay two-thirds of the cost.

Gen. Francis V. Greene, Chairman of the State Committee on Canals, speaking at the New York Board of Trade banquet, said: "Since the canals have been in such a condition that they could not carry goods at much less than railroad rates the State has begun to lose its commercial supremacy and is steadily losing it. If so, then it is evident that New York's commercial supremacy is dependent upon a cheap water route to the west. The State, through the canals, should dictate the rates for transportation and not be a supplicant for the favor of any railroad. With freight rates from Buffalo to New York of 50 to 70 cents a ton on different classes of goods as compared with \$1.15 to \$6 per ton, now prevailing on the railroads, the enlarged canal will carry at least 20,000,000 tons of freight of all classes and at a saving of fully \$18,000,000 per annum.

### JAPANESE SHIPBUILDING.

A Japanese shipbuilding firm has just turned out a 12,000-ton steel, twin-screw steamer, the Awa Maru, which, according to the United States Consul Harris, at Nagasaki who reports the fact to the state department, is equal in every respect, including cabin accommodations, to the best class of Atlantic steamships. Material has been ordered for two other steamers of the same kind for the same line, and two are under construction for another line. The shipbuilding industry in Japan appears to be flourishing, with every likelihood of it continuing so.

### THE SHIPPING BILL ENDORSED.

The New York Chamber of Commerce, after a sharp debate, resolved:

"That this chamber, after consideration of the subject, do heartily approve the objects sought to be accomplished by bill H. R. 64 (the Hanna Payne ship subsidy bill.)"

The opponents of the measure were very bitter, but were defeated by a substantial majority.

### AN INTERNATIONAL MARINE CONFERENCE.

There is a bill before the U. S. Senate appropriating the sum of \$25,000 to be expended under the direction of the President, with a view of having the ninth annual of the International Congress of Navigation which will be held in 1901, convened at Washington, D. C. This year's convention will be held in Paris.

### CASKS TO ASCERTAIN ARCTIC CURRENT DRIFTS.

The Geographical Society of Philadelphia expects to continue this year the work of setting wooden casks adrift on the ice north of this continent to demonstrate, if possible, the currents of Arctic waters north of Bering Strait. The project was suggested by Admiral Melville, Chief Engineer, U. S. N., and this society began to carry it out last year. Mr. Henry G. Bryant, president of the society, has a paper in its Bulletin telling of the preliminary work. It was Melville's idea that if oaken casks were set afloat on the ice in the waters north of Alaska they would come out in the course of four or five years somewhere between Spitzbergen and Greenland and thus demonstrate the correctness of the theory of the north-east drift of those waters, already fortified by the experience of the Jeannette and Fram expeditions. The society had a considerable number of heavy oaken casks made, in each of which a bottle was placed containing a blank form on which the finder is to record the date and locality where the cask is recovered and return the paper to Philadelphia. The casks were to be placed on heavy floe ice, for if launched in the open sea they would be too much at the mercy of winds and waves, while if deposited on heavy ice they would probably be carried on the more correct drift. Neither were they to be placed on the ice adjacent to the Point Barrow district in Alaska, where purely local currents, running east and west, exist.

Last summer the United States revenue cutter Bear carried 20 casks north and others were distributed among the steam whaling companies, having vessels in that region. Most of the casks, it was expected, would be put adrift during August and September last. The intention to repeat the experiment on the same scale this year will, it is thought, enhance the probability of definite results. Rear Admiral Melville firmly believes that the fugitive casks well justify the hopes with which the society has undertaken this experiment. "There is no doubt," he says, "that the casks will come out somewhere. Siberian driftwood has been found on the north-eastern shores of Bennett Island, on the northeast point of Novaia Zemlia, on the east coast of Franz Josef Land, on the east shore of Spitzbergen and possibly in the drift on the east side of Greenland. A strong current is known to exist at certain seasons of the year to the southward and westward between the northern end of Novaia Zemlia and the southern side of Franz Josef Land and between the southern side of Spitzbergen and Bear Island—dropping the stones from the polar pack which form the shoal of 300 fathoms between the above islands.

We may look for the casks on any of these shores or in the above mentioned drifts, and also for the possibility of demonstrating a drift to the eastward or the northward and eastward, and finally coming out by the way of Smith Sound, Kennedy Channel and Baffin Bay, as well as by the slow drift through the North American archipelago to the coast of Labrador.

### A LIFE-RAFT CRUISER.

H. Wrench Nash has patented in London what is known as the Victoria life-saving apparatus. It consists of a collapsible canvas-covered cylinder, 7 feet long, which may be expanded by means of screws working on the bamboo rods at the side. At either end is an air-tight metal compartment, which serves to keep the apparatus afloat. In the center is a water-tight compartment of India rubber. Obviously, there is scarcely a possibility of the craft swamping in the event of a storm or heavy weather. Paddles are fastened to the cylinder and may be detached for use.

Concentrated foods of all kinds, fresh water and spirits may be stored away in safety in the water-tight compartments inserted in the metal ends.





## CHICAGO.

*Special Correspondence to The Marine Record.*

The Chicago South Side Lumber Co. have purchased the steamer Philetus Sawyer.

The steamer City of Paris was chartered for corn to Buffalo at 3 cents for storage and delivery.

Capt. P. Myers et al. have recently purchased the schooner Bertha Barnes from the Stephenson Lumber Co.

Johnson & Knudson have given the steamer Gordon Campbell some new outside plank and new floors.

Capt. Thos. Higgins, formerly of the steamer Albert Soper, has been appointed master of the steamer W. P. Ketcham.

The steamer Yale is in the Chicago Ship Building Co.'s drydock, receiving some new plates and a new stern bearing.

Capt. John Prindiville chartered the steamers Jesse Spalding and John Rugee for corn to Port Huron at 2 1/4 cents for storage and delivery.

James Mowatt, dock superintendent of the Chicago Ship Building Co., left here Tuesday for a month's vacation at Funiak Springs, Florida.

Stewart Moore, U. S. Boiler Inspector at this port, is away South enjoying a well-earned month's vacation, the first he has had since his appointment to office here nearly twenty years ago.

Capt. David M. Cochrane has been appointed superintendent of the Goodrich Transp. Co. The officials and employees of the company are well pleased with his appointment, and they and his numerous friends wish him health and strength to enable him to hold the position for many years.

Capt. A. C. Majo, managing owner of the ferry steamers Belle, Hattie Lloyd, Swansea and N. H. Bruno, between Duluth and Superior, was in this city last Saturday. He is on a business and pleasure trip and intends visiting Detroit, Cleveland, Buffalo and Cape Vincent, N. Y., his old home, before returning to Duluth.

The grain traffic of the Canada-Atlantic Railway Company has increased to such proportions that the present elevator at Depot Harbor has been found to be inadequate, and the company has decided to erect a second one. The new elevator will have a capacity of a million and a half bushels, and will cost between \$250,000 and \$300,000.

W. H. Wolf, of Milwaukee, has closed a deal with Capt. James Davidson, of West Bay City, for the purchase of the towbarge Armenia, which he intends putting behind the steamer Fred. Pabst. The Armenia has a length of 288 feet, 44 feet beam and 19 feet hold, 2,040 gross tons, built in 1896. She came out in 1896, grades A1, and has an insurance valuation of about \$70,000.

At Miller Brothers' ship yard the schooner Cora A. is in dock having her topsides calked and a general overhauling, in addition to having her bottom calked, as mentioned last week; she has also received new fore and main masts. The steamer Geo. G. Hadley is receiving extensive repairs, comprising some new frames, about one-half new outside planking, the three ports on each side having been closed up, new plank shear, stringers and rail, new stern and deck aft and calking.

Drake & Maytham, of Buffalo, owners of the steel steamer W. H. Gratwick, which has been chartered for the season by the Canada-Atlantic Line, will get \$75,000 for the vessel and the insurance paid, which amounts to about \$8,000. The Gratwick will be fitted out and laid up by the company that has chartered her, so that the charter is worth about \$85,000 to the owners of the vessel. Drake & Maytham bought the Gratwick from Capt. John Mitchell and others last fall. They paid \$212,000 for her, which was exactly what she cost. The new vessel which the Canada-Atlantic people have under charter, and which has not been named yet, is said to be the steel steamer that is building at Toronto. They are figuring on getting the steamer Penobscot, of the Eddy fleet, but that vessel will not be chartered or sold until the new boats building for the Eddys, at Detroit are completed. They will not come out until July.

Lehigh Valley Transportation Co. will commence with five boats next season. The Wilkes-Barre, is being built at the Union Drydock, to be delivered on September 1st. The steamers Clyde and Oceanica were sold recently to F. P. Baird, president of the Union Iron Works. The steamers H. E. Packer and Fred Mercur were sold last September to H. J. Pierce and F. P. Baird, who have since sold them to Rogers, Brown & Co., of Tonawanda. Last May the steamer R. A. Packer was sold to Miles Barry of Chicago. The intention is to replace these five boats with three large new steel steamers. The company is now figuring on building two steamers larger than the Wilkes-Barre, and have invited bids on them.

## PORT HURON.

*Special Correspondence to The Marine Record.*

Capt. John Burns and wife have returned from their wedding trip and are at the Harrington.

The total collection at the Customs House for January were \$10,000, as against \$3,000 in the same month last year.

The steambarge City of Concord is in the Dunford & Alverston dry dock receiving a general overhauling, also steel anchors, recalked, etc.

At Grand Haven the Government tug Williams is being converted into a dispatch boat to take the place of the Gen. Gillmore. The changes necessary involve an expenditure of \$3,000.

The boilers are being placed in the steel boats at the Jenks Ship Building Company's yard. The plates are carted from the boiler works at the foot of Wall street and put together in the boats.

As soon as the ice is sufficiently thick, a corps of U. S. Engineers, of Detroit, will make a survey and take sounding at Harbor Beach, to be used in making a chart for dredging the entire harbor, which will begin early in the spring.

At Sturgeon Bay, Rieboldt & Wolter are building two large scows one for Termansen & Jensen, local quarrymen, the other for the George Pankratz Lumber Company. The scows will carry about 200 cords of stone each. Their combined cost will be \$13,000.

An interesting service of gospel song for the sailors is announced by the pastor of Ross Memorial church to be given on the evening of Feb. 11. The service will be called "From Port to Port" The various incidents in the voyage will be illustrated by songs from gospel hymns. Neat invitations are being sent out to captains and mates in Port Huron.

There is a movement on foot among light-house keepers to induce Congress to do something for them in regard to an increase in salary. It has been a great many years since there has been anything done in this matter. The present salary of the light-house keeper averages about \$600 a year, which considering the watchfulness, care and responsibility is the poorest paid branch of the Government service.

There are 18 steamers and 36 tow barges laid up at Marine City. Seventeen vessels are undergoing extensive repairs with many more still to be overhauled. The shipyard is employing 150 men in constructing two wooden ships which are well under way on the stocks and but for the bad weather, which makes the handling of timber slow and tedious, a greater force would be employed. Along with the wintering boats, Marine City gets a goodly winter population, about 400 sailors, mostly captains, mates and engineers.

## DETROIT.

*Special Correspondence to The Marine Record.*

Charles Stoeber will be chief engineer of the steamer Volunteer this year. He was in the C. B. Lockwood last year.

The naval shipping office will be closed here and the officers detailed to St. Louis about the end of this month. Quite a large number of hands shipped in various capacities at this port and all of the best kind of material.

Capt. A. J. McKay, who was elected president of the Grand Lodge of the Ship Masters' Association at Buffalo last week, is one of the most popular masters on the lakes. He has been president of the Detroit Lodge for the past five years. Capt. McKay sails the D. & C. passenger steamer City of Detroit and has been in the employ of the D. & C. company for many years.

This is one of the seasons when the vessel register ought to be puzzled to put a valuation on lake tonnage, old barges and small tanks that would have been disposed of for a song a season or two ago are now at a premium, and the fill of the captain's shaving box with gold dust wouldn't buy them; as the owner of a nearly-played-out old schooner remarked a day or two ago, "There are a few sandwiches left in the use of the old hull yet," and probably there are—for this season, at least. Almost everything that can carry coal or lumber is about picked up, and the next idea will be to build large scows, solely for season use, to transport lumber.

The custom-house marine clerk has compiled the following statistics of the number of vessels and their tonnage that entered and cleared coastwise and from Canadian to American ports and vice versa during the season of 1899: Number of vessels entered coastwise, Detroit from other American ports, 2,704; total tonnage, 1,073,028. Number cleared coastwise, to other American ports, 2,798; total tonnage, 1,105,391. Number entered from Canadian ports, 1,593; total tonnage, 236,278. Number cleared to Canada, 1,522; total tonnage, 218,382. Total number of vessels entered this district, 4,297; total tonnage, 1,309,562. Total number cleared from this district, 4,420; total tonnage, 1,323,773.

Arrangements have been made with the Detroit Ship Building Co. to have all material ready to begin work on the new fire boat as quickly as the estimated amount is allowed by the board of estimates. Mr. Kirby, consulting engineer and constructor, has promised that the new boat will be ready within 90 days. This would put her in service by July 15. The fire boat Detroit will be placed in the ship yard at once to be rebuilt. The fire commissioners are satisfied that the experiment of a wooden hull is a failure. When the two boats are in the water the districts will be divided, the new boat being given the upper half of the city,

covering the rapidly growing factory district between Orleans street and the Bell Isle bridge.

The Wolverine, National and American Steamship Companies held their annual meetings this week, at Utica, re-electing the old officers. On Tuesday, the annual meetings of the Pidgeon Transit Co., the Parker Transportation Co., the Buffalo & Duluth Transportation Co., Swain Wrecking Co., White Star Line, Peninsular Transit Co., and the State Transit Co., will be held in Hamtramck. The officers will likely remain the same. Other meetings to be held are the Ashley & Dustin Co., Alger, Smith & Co., Crescent Transportation Co., Detroit & Cleveland Steam Navigation Co., Northwestern & Roby Transportation Co., and others. It is not thought that any important changes will be made among the managers and former boards of directors, although Capt. James Millen drops out of a good deal of his vessel interests, and he was a very active member.

Insurance Commissioner Stevens has completed a statement showing the Michigan business of stock, fire and inland marine insurance companies for the last calendar year, and from it the following statistics are taken: Risks written—Fire, \$361,745,579; inland marine, \$17,800,085; total, \$379,545,664. Premiums received—Fire, \$4,376,248; inland marine, \$168,188; total, \$4,544,436. Losses paid, including some left over from the previous year—Fire, \$2,222,631; inland marine, \$421,565; total, \$2,644,196. Losses incurred—Fires, \$2,436,831; inland marine, \$389,447; total, \$2,826,278. Taxes paid the state, \$127,058.88. The showing of the three Michigan companies is as follows: Risks written—Fire, \$29,251,343; inland marine, \$2,802,576; total, \$32,053,919. Premiums received—Fire, \$295,847; inland marine, \$31,690; total \$327,537. Losses paid—Fire, \$154,751; inland marine, \$46,453; total, \$201,203. Losses incurred—Fire, \$162,866; inland marine, \$12,762; total, \$175,628. The Michigan companies pay no specific tax in this state.

## COLLINGWOOD, ONT.

*Special Correspondence to The Marine Record.*

At the annual meeting of the Northern Navigation Co. which was held here last week the directors presented their financial statement for the past year. The statement was highly satisfactory, and after some discussion, was adopted. The election of officers followed, and resulted in the re-election of the old board. They are: Jas. Scott, president; J. J. Long, vice president; Thos. Long, secretary; C. E. Stephens, treasurer. Messrs. J. J. Long, C. E. Stephens, C. Cameron and M. Burton were appointed managing committee.

The event of the past week has been the annual dinner of the Board of Trade. Before the toast list was opened the secretary read letters of regret from Hon. J. I. Tarte, Minister of Public Works, and several other gentlemen. Mr. J. J. Long, vice president of the Northern Navigation Co., speaking from a marine standpoint, reviewed the early navigation out of this port and stated that Collingwood was the only port sending vessels to Lake Superior from 1854 to 1874. He also announced that it had been the intention of the Northern Navigation Co. to put a third steamer on the Lake Superior route this season had the conditions been favorable. Many years ago we contributed towards the breakwater a large amount; later we gave \$25,000 towards the construction of a dry dock, the builder of which said he put \$35,000 in. He later abandoned it. The dock, however, has been taken over by another company, which has spent a considerable amount and made it what it is now. This dry dock was built by the people, not by the government, as in a number of cases, after the government had made this a harbor of refuge. It is the only dock west of the Welland canal, and it is capable of docking the large steamers of the Canadian Pacific, which are largest we have on the upper lakes. We later voted another \$15,000. Again the town showed their spirit by recently voting the large sum of \$50,000 to aid a steel shipbuilding concern. I can say that within a few months we will have a plant which will be in a position to build vessels of 500 feet in length, the largest required on the Great Lakes. It is proposed that we shall have as good a shipbuilding yard as it is possible to obtain up to the present.

Hon. W. Mulock, Dominion Postmaster-General, thanked the Board for the magnificent reception tendered him. Continuing, he said in part: "I have had the pleasure of witnessing the energy of the Collingwood people. I have seen proofs in the harbor and in your enterprises of the confidence that you have in your town. I have seen in your town enterprises assisted by corporate money and those built by private capital, all of which are to assist in increasing the growing commerce of the country. You touched on the completion of the St. Lawrence canals. This work we felt should be pushed to completion at as early a date as was possible, so that the present generation would feel some benefits from the sixty millions of dollars spent on the Welland canal and other improvements. The work is now completed and a vessel drawing fourteen feet can sail from the mouth of the St. Lawrence to the head waters of Lake Superior, a distance of two thousand miles, and then will only be at the threshold of Canada. This gives some idea of the area of Canada, its resources and its enormous possibilities. With the development of all the ports, and the canal and railway systems, there will be plenty of trade for all to remove the enormous wealth which is to come out of Canada. What I fear is that there will not be sufficient facilities at Montreal to handle the volume of trade which will come to that port. I conclude that we may favorably receive any application which may come from Collingwood without injustice to any sister port."



## BUFFALO.

*Special Correspondence to The Marine Record.*

Mr. and Mrs. John C. Fitzpatrick leave here on Thursday for a tour of several weeks in southern California.

The Tonawanda Iron and Steel Co. is laying out an easy \$50,000 in new work, overhauling and repairs to its new purchase fleet, they are getting everything that is called for in the way of up-keep and equipment.

Delegates Capt. Vrooman and John O'Connor of the Tugmen's Association, have returned from Chicago, where a grand lodge has been formed. Captains and engineers of tugs have organized these associations at every large port on the lakes.

The appointments of masters for the Lehigh Valley Line this season are as follows: Steamer Seneca, Dennis Driscoll; steamer Tuscarora, William Jones; steamer Saranac, Pharlane McFarland; steamer E. P. Wilber, Charles E. Tuller; steamer Tacoma, J. A. Whitesides.

We still want a marine hospital at this port and agitation for it is not likely to subside until it is built and in working order. Buffalo is every bit as much entitled to a marine hospital service as any of the other lake ports, and judging from the volume of commerce a great deal more so.

Voluntary dissolution of the Mills Drydock Co. is being asked for in the courts, on the plea that the property has been sold to the Buffalo Drydock Co. It was stated that the assets are valued at about \$200,000. An order to show cause why the company should not be dissolved was granted.

A meeting of the Inland Lloyd's was held here on Tuesday. The officers elected for this year were: President, J. S. Gadsen, Chicago; secretary, Alex. McDonald, Detroit, both re-elected. Executive Committee: Capt. Vance, Milwaukee; Capt. Elphicke, Chicago; William Sandrock, Buffalo; and the president and secretary, A. H. Drake, of Buffalo, was re-appointed chief inspector.

Speaking of the cost of tonnage for the coming season, it is reported that Drake & Maytham have chartered the former Lackawanna liners Lackawanna and Scranton, for \$50,000 each for the season, and the Cuba for \$20,000. This is a good round price, but likely to be less than they will earn. The firm is looking for the Portage Lake copper contract, and if it gets it will put the Cuba and Russia into that trade, as they can go to Black Rock with practically full cargoes.

Capt. Green is not usually caught napping, in fact he likes to catch the other fellow taking a doze if anything, he overreached himself, however in building a boiler here and sending the Lewiston to Chicago, he now finds that the railroads won't carry the boiler over bridges and under arches to his steamer in Chicago. Capt. Green will pay for his whistle, or boiler, in the detention which the boat will undergo while getting her boiler in place when she arrives here. Such things have been done before, though.

A lodge of Licensed Tugmen's Protective Association has been formed at this port. The association has lodges at the various ports and has a membership of about 800. The officers of the Buffalo lodge are: President, Thomas J. Doyle; vice-president, William Whalen; treasurer, Henry Gilbert; financial secretary, Thomas J. O'Conner; past president, Luman P. Cole; chairman, Robert McMurry; tiller, William Bradley; conductor, Nelson Tibbetts; trustees, Herbert Vroman, Robert Johnson and William Burley.

Capt. Charles Maytham states that his new opposition tug line is so well received that he will have to increase the fleet to six next season. He is working hard to secure the business of the freight lines here. He admits that he has secured some of them, but will not talk about the matter much. This was a move quite necessary to success, and it will do much toward that end. He was already sure of the entire work of the fleets of Kelderhouse, Drake & Maytham and some other smaller interests, but it happened that these are so largely in the ore business that they will not come here very regularly.

"Canada has spent \$60,000,000 on the Welland canal and other improvements, and the great state of New York can't do less for the Erie canal, what's the use of making two bites at a cherry." Such is the way a believer in the canal trade put it to me this week. Well, the Erie canal is a long lane of water to swallow in two drinks and there'll be many a gulp and a gasp before the \$60,000,000 is voted for its improvement and maintenance, but nothing less is worth accepting. The views and plans of Major Symons, Corps of Engineers, U. S. A., are heartily endorsed by the more liberal and better informed members of the committee.

Capt. Edward Smith, Charles A. Brunn and Marcus M. Drake are the Buffalo members of the Lake Carriers' Association grain committee, and they are endeavoring to induce the Western Elevating Association of Buffalo to abandon its demand for an increase of the steam shoveling rate from \$1.20 to \$2.35 per 1,000 bushels. The grain shovellers' union has asked for an increase of 15 cents per 1,000 bushels, that is, an increase from \$1.85 to \$2 per 1,000 bushels, and the aggregate increase of 30 cents per 1,000 bushels has simply staggered the Lake Carriers. Capt. Edward Smith of the firm of Brown & Co., said "I think the rate should be reduced to 75 cents per 1,000 bushels. That is a profitable rate for the elevators. The committee has fully presented the matter to the elevator owners and there it rests. Until the elevator association takes some action in conformity with our views we cannot do much." It is understood that Capt. Drake favors a 50-cent rate for the elevators. He is a veteran lake carrier and asserts that a 50-cent rate is highly profitable for elevators.

## DULUTH-SUPERIOR.

*Special Correspondence to The Marine Record.*

The work on the ore dock on Allouez bay, which has been delayed somewhat by the soft ice, has again been resumed and the greatest activity prevails. The timber work is again being rushed along as fast as possible.

A special from Humboldt, Mich., says: The Carnegie Steel Company interests have bought the Sampson mine here and will reopen the property with a strong force in the near future. Until last season no iron mines here had produced ore for eight years, while this year Humboldt will have five, and perhaps six, actively worked iron mines.

The Great Northern road has purchased 400 steel ore cars, with a capacity of 100,000 pounds each, which will be operated on the Great Northern's line between Allouez bay and the iron mines in Minnesota. The company expects to operate 1,000 cars on this line of 110 miles, during the coming season. It is expected that this will be a very busy line during the shipping season.

There is beginning to be some talk of spring business in wheat shipments, but that is about all that can be said of it. Vessel brokers say that 3½c has been paid and bid for wheat at Buffalo. Shippers say that a 3½c rate is purely speculative, that it is based on present relative prices of wheat at Duluth and the seaboard. It is doubtful if anything could be worked on a 3c. rate.

Captain Alex. McDougall has selected Hugh Calderwood of Superior, as superintendent of the new shipyard that is to be established at Collingwood, Ont., by the Collingwood Ship Building Company. Mr. Calderwood was superintendent of the shipyard of the American Steel Barge Co., at Everett, Wash., and is at present chief draftsman and superintendent at the shipyard of the American Ship Building Co., at W. Superior.

The American Association of Masters and Pilots of Steam Vessels, Duluth Harbor No. 44, will give their second annual ball on Thursday, February 22d. Arrangement Committee—Messrs. H. J. Hawkes, D. E. Steveus, Wm. Jones, A. H. Kent, D. Roy; Reception—Messrs. J. H. Norton, L. E. King, A. C. Majo; Floor—A. H. Kent, H. J. Hawkes, A. Carroll, A. J. Green, D. Roy. LaCrosse Orchestra; Fisher, prompter.

For over 30 years Capt. J. W. Miller, secretary of the Duluth board of health, sailed the seas, and there is hardly a port in the world but what the captain has visited or can tell one about. As he is a man of intelligence and a keen observer, his reminiscences are intensely interesting as well as instructive. As a result of his long experience there are few men in the city that are better posted or more conversant with the commerce of the world than Captain Miller. The captain is an ardent advocate of the St. Lawrence river route to the Atlantic, and, according to his views recently expressed in the News Tribune, he claims it is only a question of a comparatively short time before it will have the bulk of trade, thus cutting off an enormous share of New York's commerce.

The tug E. T. Carrington, owned by Mary R. Inman, has been libeled by L. J. Cody and W. S. Addis for \$5,044.95. The suit was filed in United States court. The complaint recites that on Oct. 15, 1899, Cody and Addis employed a scow and the tug Carrington to transport a quantity of supplies and merchandise to their landing place, about 22 miles down the south shore. On Oct. 21 the scow was loaded and left Duluth in tow of the tug mentioned. When within seven or eight miles of its destination, the complaint alleges that the captain of the tug, A. J. Cox, persisted on turning and going into the harbor at Old Superior, where the vessel was held a long time, contrary to the wishes of the libelants. Finally, the journey to the original destination was continued and reached. Several hours later before all the supplies were unloaded, the sea became rough, and fearing a storm, the libelants say they urged the captain to return to Old Superior, but assert that he refused. The next day, the storm increasing in severity, the captain decided to go back to Old Superior, and started with the scow stern foremost. The tow line shortly afterwards broke in two, and the scow and merchandise were lost. The complaint alleges that the scow was unseaworthy, the master was incompetent and the tow line was old and poor, and Cody and Addis ask to be awarded the value of the cargo.

## CLEVELAND.

*Special Correspondence to the Marine Record:*

Frank Stoeber, who was chief engineer of the steamer W. D. Rees last season, has been appointed chief of the steamer H. W. Oliver.

There has been some inquiry during the week for steamers to carry ore from the head of the lakes. Marquette has also been mentioned, but Escanaba is quiet enough not to be heard from.

The many friends of Mr. W. B. Stockman, late forecast official of the Weather Bureau at this port, will be pleased to learn that he is fast convalescing after an attack of yellow fever in Havana, Cuba.

H. D. Goulder, Esq., has been in Detroit for several days engaged on the Morley-Landsdowne collision case. From the contradictory evidence so far brought out in the case Judge Swan will have a glorious old time balancing between true evidence and incontrovertible facts.

Capt. Jackson, who sailed the steel steamer Lagonda for the past two seasons, will command her again this season. He has been in the employ of Mitchell & Co. since 1890. He sailed the wooden steamer W. H. Gratwick his first year, and afterwards had charge of the steamer John Mitchell.

J. C. Gilchrist has bought the steamers Alexander Nimick and John Harper and the schooners Antrim and Tyrone. Those who made their predictions some time ago that the vessels were bought from Geo. E. Tener, president of the American Transportation Co. Drake & Maytham, of Buffalo, are interested in the transaction. They get the steel tow barges and Gilchrist the wooden steamers.

It is said that there is much more ice around the harbor this year than there was during the same time last year. Those who made their predictions some time ago that the season of navigation would soon be open, as there was little ice forming, have had a chance, of late, to hedge on their opinions and place the opening a week or two later than they had formerly guessed at.

Capt. Parsons has been master of steamers for the past twenty years and is one of the most successful captains on the lakes. He has had charge of vessels of the Mitchell fleet since 1888. His first command in that line was the steamer R. L. Fryer. He brought the steel steamer W. H. Gratwick out and sailed her for six years, when he was promoted to the command of the large, steel steamer M. A. Hanna, which boat he will sail the coming season for the same owners.

The steel steamer to be named J. J. Hill, building to the order of the American Steamship Co., Chicago, will be launched from the Lorain yards of the American Ship Building Co. on Saturday, February 24. The Hill is a sister ship to the recently launched Gates, and is of the 500 foot class, coming within a few feet of that length over all. Lorain has the distinction, also the honor, of constructing and putting afloat the largest steel steamer ever built on the lakes. Half a century ago Lorain was quite a prominent shipbuilding point, for, and at the time. It now looks as if she was to pick up the thread of her former glories, as it were, and become one of the most important steel shipbuilding centers in the United States. Ports flourish, then wane, and afterwards become industrially as well as commercially prosperous again, so mote it be with Lorain.

About one hundred members of the Ship masters' Association attended special services at St. Mark's Protestant Episcopal church on Sunday last. Rev. Dr. Lloyd, the rector of the church, preached the sermon. He said that the seamen could get nearer to God than any other being when they were far out at sea with nothing in sight but the sky and water, and with the feeling that no one was present but the Maker. Rev. Dr. Lloyd drew comparisons between the compass and the conscience and the chart and the Bible. He warned the seamen to obey the dictates of their conscience as they would obey the needle of the compass. He told them that the compass would be worthless without a chart, and the conscience less valuable without the Bible. The Christian's helm is the will, which must not be neglected nor allowed to lie dormant for a moment, or the ship of life will be wrecked. The minister said that the man needs religion just as much as his wife and children; that an irreligious man is a power for evil, but a truly religious man, no matter if he is weak, is a power for good.

MR. C. P. GOODYEAR, of Brunswick, Ga., on an "understanding" with the War Department, has deepened the channel that crosses the center bar in front of the harbor at that town, from a depth of 17 to a depth of 24 feet. When he began work the total tonnage of the port was 46,183 tons, valued at \$5,600,000, this for the year 1890. His operations have been accompanied by a steady increase of Brunswick's ocean trade, which reached \$21,508,000 value in 1898, or over 300 per cent. in six years. His enterprise, though it has very decidedly benefitted the town and added to the trade of the country—he has deepened the channel seven feet—has left him \$25,000 in debt. He sacrificed a large law practice, mortgaged his property to carry on his work, and finds himself now a poor man. His townsmen and shipping interests are grateful, naturally, but gratitude don't meet one's notes or clear incumbrances from the roof that shelters one's family. Surely Congress will see that Mr. Goodyear gets justice. Mr. Goodyear's expenditures were expressly authorized by the War Department. Payment of his claim is urged by Secretary Root, but he must, all the same, go to the expense of getting an act for his relief through Congress, that will probably cost him the half of all his claim will come to, if it shall be paid.

WITH few exceptions, the stockholders of the lake transportation companies having headquarters in Detroit met to elect officers this week. The only important changes were in the companies in which Capt. Millen formerly held stock, L. C. Waldo becoming president of the Swain Wrecking Co., W. C. McMillan president of the Buffalo & Duluth Transportation Co., and L. C. Waldo vice-president of the White Star line. The Northern Lakes Transportation Company, of which C. A. Black is president, C. B. White vice-president, and A. McVittie manager, held over its old officers, the company being now in liquidation, having sold its property. The Detroit Transportation Co., Dry Dock Navigation Co. and Red Star line have sold out, and the Ogdensburg Transit Co. has moved to New York state. The National Steamship Co., organized six weeks ago, elected the following: A. McVittie, president; J. G. Keith, vice-president; M. E. Farr, secretary and treasurer, and C. B. Calder and Frank E. Kirby, Directors.



### SHIPBUILDING RETURNS—TONNAGE BUILDING UNDER CONTRACT OR ORDERED AT THE COAST SHIPYARDS OF THE UNITED STATES.

The following statement shows the steel vessels reported under construction or under contract at shipyards on the seacoast of the United States in January, 1900, the statement concerning merchant vessels being furnished in response to inquiries addressed on January 17 by the Bureau of Navigation to the managers of the yards. The statement concerning war vessels is furnished by the Navy Department. The vessels are all steam vessels; no steel sail vessels having been reported at the present time.

The returns cover 50 war vessels, of 140,313 tons (displacement.) Besides these Congress has authorized six war vessels of 76,500 tons (displacement), contracts for which have not been let. Ten steamships of 81,600 gross tons are returned as for the foreign trade; two for the Pacific Mail Steamship Company; two for the International Navigation Company; three for the Oceanic Steamship Company (Spreckles), and three for the New York and Cuba Mail S. S. Co. All of these vessels are eligible for subsidy under the ocean mail act of 1891. The three Oceanic steamships necessarily stop at Hawaii en route to Australia, and the two Pacific Mail Steamships may stop there en route to Asia. For the Hawaiian trade four steamships of 26,500 gross tons are reported, and for the coasting trade 45 vessels of 76,007 gross tons.

The statement should not be construed as indicating the tonnage which can be built and launched on our seaboard during twelve months, as it is greatly in excess of that amount. Some of the war vessels have already been about three years in building, and others require more than a year to complete. Some of the merchant steamships will not be launched in more than a year, and some have been contracted for but not begun.

The report is believed to include all the seacoast yards where steel construction is now in progress, the tons given are gross. Inquiries addressed to the following, however, have not been answered: John H. Dialogue, Camden, N. J.; S. W. Skinner & Co., Wilmington, N. C.; Crescent Shipbuilding Co., Elizabethport, N. J.; W. & A. Fletcher, Newburg, N. Y.; Fore River Engine Co., Weymouth, Mass.

#### NEWPORT NEWS SHIPBUILDING COMPANY, NEWPORT NEWS, VIRGINIA. Men employed, 6,000; capital invested, \$10,000,000. Merchant Vessels.

NAME	TONS	SPEED	OWNERS	TRADE
Not named	11,300	18	Pacific Mail S. S. Co	Hawaii and Asia
do	11,300	18	do	do
Comus	5,000	16	Cromwell S. S. Co.	N. Y. & New Orleans
Proteus	5,000	16	do	do
Not named	5,000	15	S'uthern Pac S. S. Co	do
do	5,000	15	do	do
do	5,000	15	do	do
do	5,000	15	do	do
Total, 8	52,600			

#### WAR VESSELS.

Name	Tons.	Speed.	Type.
Kearsarge	11,525	17	Battleship.
Kentucky	11,525	17	do
Illinois	11,505	17	do
Missouri	12,230	18	do
Arkansas	3,235	12	Monitor.
Total (5)	50,000		

#### UNION IRON WORKS, SAN FRANCISCO, CAL. Men employed, 3,500; capital, not stated. Merchant Vessels.

NAME	TONS	SPEED	OWNERS	TRADE
Not named	8,500	11	Amer-Hawaiian S. S. Co.	Hawaii
Several small steamers	Not stated	Not stated	Not Stated	Coasting
Total, Not stated				

#### WAR VESSELS.

Name.	Tons.	Speed.	Type.
Wisconsin	11,565	17	Battleship.
Ohio	12,440	18	do
Tacoma	3,200	17	Cruiser.
Wyoming	3,235	12	Monitor.
Paul Jones	420	29	T. B. Destroyer.
Perry	420	29	do
Preble	420	29	do
Total (7)	31,700		

#### BATH IRON WORKS, BATH, MAINE. Men employed, 1,100; capital invested, \$600,000. Merchant Vessels.

NAME	TONS	SPEED	OWNERS	TRADE
Not named	525		N. Y. N. H. & H. Ry Co	Tow-boat
do	525		do	do
Total, 2	1,050			

#### WAR VESSELS.

Name.	Tons	Speed.	Type.
Cleveland	3,200	17	Cruiser.
Connecticut	3,235	12	Monitor.
Bagley	167	28	Torpedo Boat.
Barney	167	28	do
Biddle	167	26	do
Total (5)	6,936		

#### MARYLAND STEEL CO., SPARROWS' POINT, MD. Men employed, 1,000; capital invested, \$1,250,000

NAME	TONS	SPEED	OWNERS	TRADE
Not named	3,600	9½	Boston Towboat Co	Coasting
do	3,600	9½	do	do
do	3,800	10½	Metropolitan Dredging Co.	do
do	3,800	10½	do	do
Total, 4	14,800			

#### WAR VESSELS.

Name.	Tons.	Speed.	Type.
Truxton	433	30	T. B. Destroyer.
Whipple	433	30	do
Worden	433	30	do
Total (3)	1,299		

#### MORAN BROS.' CO., SEATTLE, WASH.

Men employed, 475; capital not stated.  
Two tugs, particulars not stated. War Vessels, none.

#### THE NEAFIE & LEVY SHIP AND ENGINE BUILDING CO., PHILADELPHIA, PA. Men employed, 1,100; capital stock, \$800,000.

NAME	TONS	SPEED	OWNERS	TRADE
Augusta	3,000	17	B. C. & R. S. S. Co.	Coasting
Edw'd Luckenback	700	12	Lewis Luckenback	do
Richmond	700	12	Coastwise S. S. Co.	do
Covington	700	12	do	do
Northumberland	900	14	Weems Line	do
DeWitt C. Ivins, No. 2	214	11	Michael Moran	do
Michael Moran	214	11	do	do
Total, 7	6,420			

#### WAR VESSELS.

Name.	Tons.	Speed.	Type.
Denver	3,200	17	Cruiser.
Bainbridge	420	29	T. B. Destroyer.
Barry	420	29	do
Chauncey	420	29	do
Total (4)	4,460		

#### PUSEY & JONES, WILMINGTON, DEL.

Men employed, 150 in yard and 700 in shops; capital, \$710,000.  
Merchant Vessels, none. War Vessels, none.

#### ATLANTIC WORKS, EAST BOSTON, MASS.

Men employed, 450; capital, \$700,000.  
Merchant Vessels, none. War Vessels, none.

#### CONTINENTAL IRON WORKS, BROOKLYN, N. Y.

Men employed, 500; capital, \$100,000.  
Merchant Vessels, none. War Vessels, none.

#### COLUMBIAN IRON WORKS, BALTIMORE, MD.

Men employed, 700; capital, \$250,000.  
Merchant Vessels.

NAME	TONS	SPEED	OWNERS	TRADE
Hartford	1,554	15	Hartford & N. Y. Trans. Co.	Coasting
Savage	440	10	Consolidated Coal Co.	do
Total, 2	1,994			

#### WAR VESSELS.

Name.	Tons.	Speed.	Type.
Tingey	165	26	Torpedo Boat
Plunger	168	8	Submarine Boat.
Total (2)	333		

#### BURLEE DRY DOCK CO., PORT RICHMOND, S. I., N. Y. Men employed, 600; capital invested, \$300,000. Merchant Vessels.

Name	Tons	Speed	Owners	Trade
Not named	2,200		Baker Tran Co. N. Y.	Barge
do	200		Capt. H. Hoffman, N. Y.	Tug
do	260		Bee Line Trans. Co. N. Y.	Tug
do	200		Easton & Amboy R. R. Co.	Tug
do	200		do	Tug
do	200		do	Tug
do	500		Standard Oil Co.	Barge
do	500		do	Barge
do	300		N. Y. C. Lighterage Co.	Stm. Lighter
Total, 9	4,560			

#### T. S. MARVEL & CO., SHIPBUILDERS, NEWBURG, N. Y. Men employed, 300; capital invested, \$150,000.

Name	Tons	Speed	Owners	Trade
Not named	280		Phila. & Norf. R. Co.	Tug
do	85		Cornell Steamboat Co.	Tug
do	85		do	Tug
do	1,000		Brooklyn Ferry Co.	Ferry Boat
do	1,000		do	do
do	1,100		N. Y. C. R. R. Co.	do
Total, 5	3,550			

#### GEORGE LAWLEY & SON CORPORATION, SOUTH BOSTON, MASS. Men employed, 200; capital invested, \$125,000.

#### WAR VESSELS.

Name.	Tons.	Speed.	Type.
Blakely	165	26	Torpedo Boat
De Long	165	26	do
Total (2)	330		

#### GAS ENGINE AND POWER CO. & CHAS. L. SEABURY & CO., NEW YORK. Men employed, 900; capital invested, \$600,000.

#### WAR VESSELS.

Name.	Tons.	Speed.	Type.
Stewart	420	29	T. B. Destroyer.
Wilkes	165	26	Torpedo Boat.
Bailey	235	30	do
Total (3)	820		

#### WILLIAM CRAMP & SONS COMPANY, PHILADELPHIA, PA. Men employed, 6,000; capital stock, \$5,000,000. (This does not nearly represent the actual investment, nor half cover total value of property.) Merchant Vessels.

Name	Tons	Speed	Owners	Trade.
Not named	12,000	17	International Nav. Co.	Transatlantic
do	12,000	17	do	do
Seirra	7,000	17	Oceanic S. S. Co.	Hawaii & Australia
Sonoma	7,000	17	do	do
Ventura	7,000	17	do	do
Not named	6,000	18	N. Y. & Cuba Mail	Cuba & Mexico
do	4,000	15	do	do
do	4,000	15	do	do
do	3,500	14	Not stated	Not stated
do	3,500	14	do	do
Total, 10	66,000			

#### WAR VESSELS.

Name.	Tons.	Speed.	Type.
Alabama	11,565	17	Battleship.
Maine	12,300	18	do
Total (2)	23,865		

#### WILLIAM R. TRIGG CO., RICHMOND, VA. Men employed, 700; capital not stated.

#### WAR VESSELS.

Name.	Tons.	Speed.	Type.
Galveston	3,200	17	Cruiser.
Dale	420	28	T. B. Destroyer.
Decatur	420	28	do
Shubrick	165	26	Torpedo Boat.
Stockton	165	26	do
Thornton	165	26	do
Total (6)	4,535		

#### ARTHUR SEWALL & CO., BATH, MAINE. Men employed, about 250; capital, \$150,000. Merchant Vessels, none. War Vessels, none.



THE HARLAN & HOLLINGSWORTH CO., WILMINGTON, DEL.  
Men employed, 2,000; capital stock, \$1,000,000; \$1,500,000 in new work at present.  
Merchant Vessels.

Name	Tons	Speed	Owners	Trade
San Juan	3,500	12	N. Y. & P. R. S. S. Co.	N. Y. & Puerto Rico
Grecian	2,550	15	Boston & Phila. S. S. Co.	Coasting
Manna Hata	850	12	N. Y. & Balto. Trans. Co.	do
Chesapeake	650	12	do	do
Wilmington	175	12	Penna. R. R. Co.	Tug
Harrisburg	175	12	do	Tug
Johnstown	175	12	do	Tug
Not named	2,550	15	Metropolitan S. S. Co.	Tug
Total, 8	10,625			

## WAR VESSELS.

Name	Tons	Speed	Type
Hopkins	408	29	T. B. Destroyer
Hull	408	29	"
Stringham	340	30	Torpedo Boat.
Total, (3)	1,156		

DELAWARE RIVER IRON SHIP BUILDING & ENGINE WORKS,  
CHESTER, PA.  
Men employed, 1,000; capital not stated.  
Merchant Vessels.

Name	Tons	Speed	Owners	Trade
American	6,000	10½	Amer-Hawaiian S. S. Co.	Hawaii
Hawaiian	6,000	10½	do	do
Oregonian	6,000	10½	do	do
Pennsylvania	1,400	10½	N. Y. P. & N. Ry Co	Coasting
Total, 4	19,400			

War Vessels, none.

WOLF & ZWICKER IRON WORKS, PORTLAND, OREGON.  
Men employed, 450; capital invested, \$300,000.  
Merchant Vessels.

Name, Kvichak; tons, 1,600; speed, 9; Owners, Alaska Packers' Association; trade, coasting.  
War Vessels—Name, Goldsborough; tons, 247; speed, 30; type, torpedo boat

FORE RIVER ENGINE CO., WEYMOUTH, MASS.  
(Merchant vessels, men employed and capital invested, not reported.)

## WAR VESSELS.

Name.	Tons.	Speed.	Type.
Des Moines	3,200	17	Cruiser
Lawrence	400	30	T. B. Destroyer.
Macdonough	400	30	"
Total (3)	4,000		

CRESCENT SHIP BUILDING CO., ELIZABETHPORT, N. J.  
(No report as to merchant vessels, men employed or capital invested.)

## WAR VESSELS.

Name.	Tons.	Speed.	Type.
Chattanooga	3,200	17	Cruiser.
Florida	3,235	12	Monitor.
Nicholson	174	26	Torpedo Boat.
O'Brien	174	26	"
Total (4)	6,783		

## THE FRENCH NAVAL BILL.

The French Government naval bill asks for 476,000,000 francs for the fleet, and provides six first-class battleships, five armored cruisers, 29 torpedo-boat destroyers, 112 torpedo boats and 26 submarine boats. It also asks for 140,000,000 francs to defend the coasts, including 38,000,000 francs for the defence of Bizert, the French naval stronghold on the coast of Tunis.

Another bill provides for the establishment of independent cable communication between France and her colonies, bringing the total expenditure up to 900,000,000 francs.

## RECEIVED CHIEF'S PAPERS.

Engineers Jay A. Papp and James McGlynn have returned from Cleveland with chief engineers' papers, having successfully passed the examination. This will be pleasant news for the many friends of the engineers named.—Toledo Daily Blade.

THE RECORD is obliged to the Blade for this news item, as the local inspectors are instructed to refuse to give these names for publication in Cleveland. However, we have other measures now under consideration to obtain the names and addresses of men gaining licenses.—ED.

# ADDRESS OF CAPT. KEITH, 1ST VICE-PRESIDENT LAKE CARRIERS' ASSOCIATION, BEFORE THE CHICAGO BOARD OF DRAINAGE TRUSTEES.

*Drainage Trustees, Chicago, Ill.*

GENTLEMEN:—Pursuant to your request to put in writing my statement made before your Board Friday last, re-curren in Chicago river and its consequences on navigation, I beg to confirm same, in substance at least.

Fifteen years practice as master of vessels, and eighteen as freight agent and owner of tonnage continually plying on our river, should at least give me experience, if not otherwise qualified to anticipate the future results to marine commerce on the Chicago river, though the increased current caused by the opening of the drainage canal.

Should the maximum current (observed at Van Buren St.) since the opening of the canal, continue, it would not only add to the cost of freighting from our port by extra towing and loss of time, but would render the passage of the river hazardous to such a degree, that its commerce would be impaired to an extent where higher freight rates would follow as an inducement to shipping to assume the delay and risk of colliding with other craft and fixed objects, which is sure to be the case with a stiff current. No stream of its size in the world accommodates one-half the tonnage that passes over Chicago river's former sluggish surface, which was a virtue to marine interests if a vice to the rest of the world. A current of any speed will interfere with the river's commerce in the ratio of its velocity, until the commerce is destroyed. I do not mean by this that the swiftest current that has existed this year, or even a greater, would make it impossible for craft to go up and down, but delay, damage and kindred difficulties will be too numerous to assume without compensation for the risk. And our supremacy as the first port on the lakes depends on the measure of damages, detention and other obstacles to be added to an already over crowded and tortuous stream.

From my point of view, the first trouble will arise at Washington street tunnel for lack of water. This has proved a stumbling-block for years, and has been a thorn not in the side but in the bottom. This has restricted the larger class of vessels 5 per cent. of their cargoes, and for every inch of water from last year's level 1 per cent. of cargo is sacrificed to this class of craft, which is now the predominant one. If Washington street bridge can be abolished, I think that the deficiency of water may be compensated for.

The next trouble will be at Adams and Jackson streets. The river being narrow at this point increases the current. The by-pass when completed may slacken the current. The next troublesome point to Washington street tunnel is, or will be, at Harrison street. Here a considerable bend in the river exists with a coal dock on the west side and a railroad dock on the east. With a vessel on one side, the current will be increased, and with a vessel on both sides the passage of Harrison street will be hazardous.

The next dangerous point is at Eighteenth street. A sharp bend in the river is here encountered, which has always been one of the worst points of the river, being well worthy of the name it has earned, "Collision Bend." But a few hundred feet from this point south, comes the Alton railway bridge. Here the river is very narrow with an active coal dock on one side and the Indiana elevator on the other. With both docks working, the river is blocked only to the smallest sized vessel. The river from Eighteenth street to Canal street should be widened. Then comes Twenty-second street bridge, the last and worst. Two active docks, one on either side, directly opposite each other, when both are employed, which is frequently the case, no craft wider than a tug can pass. The point has always been troublesome and if it becomes more so, only a part of it can be charged to the drainage trustees, and this would also be true of some other points. Above this the traffic is less, and with sufficient depth of water, we may flounder through.

One more troublesome proposition is before us. A slip, in fact two slips on the west side of the river at Sixteenth street. The Union elevator is located on one and Armour & Co's. elevators E and F on the other. All are active houses, and the slips at right angles with the river. Loaded vessels coming out take the full width of the river, and considerable time is employed in the act, which will serve to dam the river effectually. The same conditions exist at Armour & Co's. elevators C and D located on slips south of South Halsted street, but to a less extent, and I do not look for much difficulty there, but what can be overcome.

Bridges forming the greatest obstruction to navigation are Washington, State, Twenty-second, Eighteenth, Alton Railroad bridge, (near Canal street,) Harrison and Randolph street, in the order named. All center pier bridges should come out, but those named, first. It seems to be unsettled whether it is the duty of the trustees or the city to remove and replace the bridges. This is a matter of little consequence to the public, as the tax-payers have to foot the bills in either case. My choice would be for the trustees to do this work, as we would get quicker relief.

I am not unmindful that I am a citizen of Chicago and aware of many of your trials and tribulations, and the expenditure of so great an amount of money to achieve the purpose you have so nearly attained; and when we begin to move I am prepared to meet with and tolerate inconveniences unknown before to Chicago river, in lieu of the purity and sanitary conditions brought about, whereby the city will be the beneficiary, and marine interests suffer, to the greatest extent we can possibly endure, before we will complain.

IN A LETTER TO THE MARINE RECORD THIS WEEK, CAPT. J. G. KEITH STATES AS FOLLOWS:

I have purposely omitted from the foregoing statement any mention of the current, but will now say to you that its speed reaches from 1 to 3½ miles per hour in my opinion, according to the flow permitted to go over the dam at Lockport. I have no doubt but when the full flow of water is passing through our river that the current will be about 1½ to 2 miles per hour, perhaps a little more, but I do not think that the required quantity of 360,000 cubic inches per minute will be needed, as about 200,000 to 250,000 is the greatest quantity that has passed over at one time since the opening of the canal, and the water in our river is now as clear as in the lake. Fish are half way up the Chicago river, and in a short time they will be from one end to the other.

I have been before the Sanitary Trustees and the Mayor during three days of last week, in the interest, of the Lake Carriers' Association, Chicago Vessel Owners and the River Improvement Association, each of which I am a member, and I am certain that some good will result from my efforts. The principal obstruction will be Washington street tunnel. I have endeavored to show the Mayor that by removing Washington street bridge, we will gain as much in depth as the deficiency of water caused by the canal, and have hopes of accomplishing this end. At the present time the water in the south end of our river is 2 to 2½ feet lower than it was last year, but this will be offset by dredging. The current will be the main thing we have to contend with, and I feel assured that will also be overcome. So vessel men need have no fear but the Chicago river will be open the coming season as it has been in the past. We may suffer more inconvenience at times and places than before, but this we must be prepared for, as the purification of the river can only be attained by a current, and \$32,000,000 has already been spent in the project up to the present time, and several million more to be added before our river is widened and center pier bridges taken out and replaced by bascule bridges, to make our river what it should be. But, in the meantime, immediate relief must be provided before the opening of navigation, and we are in a fair way to get it."

Very truly yours,

J. G. KEITH.

## VISIBLE SUPPLY OF GRAIN.

As compiled for THE MARINE RECORD, by George F. Stone, Secretary Chicago Board of Trade.

CITIES WHERE STORED.	WHEAT. Bushels.	CORN. Bushels.	OATS. Bushels.	RYE. Bushels.	BARLEY. Bushels.
Buffalo	2,139,000	237,000	153,000	77,000	894,000
" afloat	443,000	205,000			
Chicago	14,931,000	4,931,000	1,359,000	175,000	32,000
" afloat	85,000	1,167,000	158,000		
Detroit	553,000	381,000	87,000	9,000	51,000
Duluth	7,423,000	469,000	180,000	379,000	179,000
" afloat	248,000				
Fort William, Ont.	2,982,000				
Milwaukee	235,000			8,000	10,000
" afloat			477,000		
Montreal	56,000	21,000		13,000	28,000
Port Arthur, Ont.	235,000				
Toledo	1,153,000	940,000	161,000	8,000	
Toronto	46,000		4,000		46,000
Grand Total	54,363,000	14,583,000	5,776,000	1,134,000	1,690,000
Corresponding Date, 1899	28,984,000	28,208,000	7,038,000	1,567,000	3,211,000
Increase		57,000	444,000		
Decrease	1,234,000			29,000	60,000

While the stock of grain at lake ports only is here given, the total shows the figures for the entire country except the Pacific Slope.





ESTABLISHED 1878.

Published Every Thursday by

THE MARINE RECORD PUBLISHING CO.,

Incorporated.

C. E. RUSKIN, - - - - - Manager.  
CAPT. JOHN SWAINSON, - - - - - Editor.

CLEVELAND, - - - - - CHICAGO,  
Western Reserve Building. - - - - - Royal Insurance Building.

## SUBSCRIPTION.

One Copy, one year, postage paid, - - - \$2.00  
One Copy, one year, to foreign countries, - - - \$3.00  
Invariably in advance.

## ADVERTISING.

Rates given on application.

All communications should be addressed to the Cleveland office,  
THE MARINE RECORD PUBLISHING CO.,

Western Reserve Building, Cleveland, O.

Entered at Cleveland Postoffice as second-class mail matter.

CLEVELAND, O., FEBRUARY 8, 1900.

THE thanks of the RECORD are due Capt. C. E. Benham, Special Deputy Collector of Customs, Cleveland, for courteous consideration during the past week.

WE are pleased to acknowledge the receipt of a coastwise shipbuilding list to date, from the Hon. Eugene T. Chamberlain, Commissioner of Navigation, Washington, D. C.

THE RECORD herewith acknowledges the receipt of duplicate copies of the "Meteorological Chart of the Great Lakes," also other courtesies at the hands of the Chief of the Weather Bureau.

WE have to thank Major T. W. Symons, Corps of Engineers, U. S. A., stationed at Buffalo, for a complimentary copy of the "Report of the Committee on Canals of New York State," also for a duplicate copy from C. H. Keep, Esq., Secretary of the Buffalo Merchants' Exchange.

THE steamer John W. Gates, recently launched from the Lorain yards of the American Ship Building Co., is 497 feet over all, and not 500 feet, as erroneously stated in many publications. Other sources qualify the 500 feet length by making her within a few inches of that measurement. The launch of the sister ship J. J. Hill takes place on Saturday, February 24th, from the Lorain yards of the American Ship Building Co.

WE found it convenient this week to request certain particulars from subordinate officers of the Treasury Department, located at prominent lake ports. Some of these men responded in a sensible manner, others acted after a senseless incomplete fashion, and one superior of a district requested his subordinates in office to notify the press what the RECORD was after, and he even went so far as to disclose our private correspondence written to his superior in office at Washington, D. C.; thus committing a breach of good manners, to say the least. Wonder if this man is financially, or in any other way, interested in a marine news bureau—but, more anon.

WE have this week received from the Hydrographic Office, Bureau of Equipment, Navy Department, duplicate miniature charts of the Great Lakes, forming an index to coast, special and harbor charts issued by the Hydrographic Office, Chief of Engineers, War Department, and the British Admiralty. The Hydrographic Office has issued in the past pilot charts setting forth the occurrence and duration of fog, average times of the opening and closing of navigation, also information concerning the Canadian and United States storm and weather signals, canals, docks and the use of oil for calming stormy waters. The latter are compiled as general charts of the lakes.

## HARDLY A SAFE WATERWAY.

It is not at all certain that a clean 14-foot waterway will be found at the opening of navigation via the St. Lawrence system of canals. There is shoal water and a foul bottom at several points yet. River pilots hold that the channel, where there are such strong cross currents as exists in Lake St. Louis, should have been six hundred feet wide to make it easy and safe to large fourteen-foot vessels in tows; to make it possible for navigation without considerable risk it should at least have been four hundred feet in width. By the new and cheap method of grain transportation, two of these large vessels are towed by a third which is supplied with steam power. Of course where there are currents, the towing vessels are drawn to one side or other by the current. Every foot would be needed in a four hundred foot channel when these tows of vessels have to pass one another amid cross currents. The government engineers were of the opinion that three hundred feet was sufficient, and that is the width. However, the work has been roughly done, the sides of the channels have, it is said, been left rough and ragged, and this contributes an additional danger to the safe carriage of cargoes.

## ICE REPORT FOR THE LAKES.

It is a matter of congratulation that the RECORD is enabled to advise the entire marine interests of the lakes, that the Chief of the Weather Bureau, Prof. Willis L. Moore, has made preparations for a more extensive system of ice reports on the Great Lakes for the remainder of the season prior to the opening of navigation. This information will no doubt be collaborated by the forecast official and marine agent Norman B. Conger, Detroit, and thence telegraphed to the principal lake ports. The RECORD is actually, positively and invariably modest in its utterances, is not the most widely quoted trade publication in the United States, because it is a class paper only, nor is it the most profusely illustrated with non-applicable pictures; at the same time, we usually make our mark and feel free to state that our call upon the Chief of the Weather Bureau, according to the foregoing announcement, will redound to the best interests of vessel owning, shipping, chartering and underwriting circles. Now we will have regular, accurate, official and authentic ice reports at every change and from every point on the Great Lakes until the opening of navigation.

A STRONG committee to represent the Lake Carriers' Association and general lake marine interests, is required in Washington next week. The counsel for the association is unremitting in his efforts to obtain and maintain the greatest good for the greatest number, but he is not omnipotent nor omnipresent; moreover, he is not entirely adamant and can be worn away mentally, professionally and physically, or rather, the last term argues for the two former. The standing committee of the House on Merchant Marine and Fisheries is in session, the important question of maintaining the level of the lakes is also to be threshed over. So we say again, more power to the representatives of the Lake Carriers' Association forming this Washington committee, and their valiant counsellor.

## SNOW AND ICE BULLETIN.

(Weather Bureau.)

While over portions of the lake region, Northern New England and Upper Mississippi Valley, there is now more snow than at the corresponding date of 1899, there was, upon the whole, at that date a much larger area covered, and in portions of the upper lake region greater depths than there are at this time.

Duluth, Minn., February 5.—Superior and St. Louis bays covered with ice ranging from 12 to 24 inches thick, a few fields drifting; thin ice in lake near Duluth and forming along shores.

Notwithstanding the decided increase in ice formation during the past two weeks, there is still, with a few exceptions, decidedly less ice than at the corresponding date of 1899, when there was, as a rule, from 7 to 10 inches more ice in the upper Mississippi and upper Missouri rivers, and from 1 to 12 inches more in the lake region.

A BILL to grant an American register to the steamer Windward was introduced in the House of Representatives, on January 18. It authorizes the Secretary of the Treasury to cause the foreign-built steamer Windward, owned by Engineer Robert E. Peary, United States Navy, to be registered as a vessel of the United States, provided that she shall not engage in the coast-wise trade of this republic.

## AVERSE TO THE DAM AT NIAGARA.

In the sixteenth annual report of the Commissioners of the Niagara Reservation which has just been submitted to the New York State Legislature, several matters of interest are touched upon. Concerning proposed improvements for which an appropriation is asked, the report states that:

In 1890 a topographical survey of the falls was made under the direction of the State Engineer and Surveyor, and a valuable and exhaustive report submitted. During the ten years that have elapsed since that time great masses of rock have fallen from the crest of the falls, causing many changes in the contour of the cataract.

The recession of the falls is a subject of great interest to the public, especially to scientists at home and abroad, and it is desirable that a re-survey should be made this year, so as to show the change in the past ten years, and have recorded the exact form, location and other topographical features of the cataract at the close of the nineteenth century.

A bill has been introduced to the Congress of the United States providing for the construction of a dam or jetties at the head of Niagara river, at Lake Erie, in order to raise the level of the water in the Great Lakes. As such an obstruction would be liable to diminish the volume of water flowing over the falls, and thus to injure the beauty of the natural scenery of Niagara, which the state of New York has expended its means and exerted its authority to protect, the proposed legislation by Congress is a matter of concern to the legislature and the people of the State, and to the public generally at home and abroad.

The necessity for legislation upon the subject, if any such necessity exists, is probably due to the excessive diversion of the water of the Great Lakes, thus referred to in the previous report of this commission.

The volume of the river and cataract of Niagara is of course dependent upon the water supply of the Great Lakes. The Niagara river is but the overflow of Lake Erie, into which flows the waters of other lakes. The lowering of the levels of these lakes would diminish the flow into Lake Erie and reduce the volume of the Niagara river. Any very large withdrawal or diversion of water from one or more of the Great Lakes would scarcely fail to be noticeable in a reduced flow at the cataract.

The commissioners deem it advisable that the National Government be requested to appoint a commission to confer with a Canadian commission as to the means to be devised to prevent any excessive diversion of the waters of the Great Lakes, and consider the whole subject of the uses and control of these waters, and to report its conclusions to Congress, with such recommendations as it may desire to submit.

"Any measure of this kind, which threatens even remotely the investment by the people, for the preservation of the beauty of the natural scenery of Niagara, should be closely questioned," the commission declares.

## A NEW SHIPPING FIRM.

A new organization, known as the Atlantic Coast Steamship Co., has among its officers a number of lake vesselmen. The company was originated in Buffalo by John L. Crosthwaite, who has been elected president, with Lewis A. Hall, vice-president; Wallace Flint, secretary and treasurer; and for directors the above and E. B. Freeman and Charles R. Flint. The venture is an extension of the operations of the Export Lumber Co., of Bay Mills, Mich., to the coast. Lewis A. Hall is president of the Export Co. and also of the Atlantic Coast Lumber Co., which has immense yellow pine interests in South Carolina. He lives in New York. Wallace Flint is of the New York firm of Flint, Eddy & Co.; Charles R. Flint is the New York "rubber king;" E. B. Freeman is a capitalist of Georgetown, S. C. The company has extensive docks at Georgetown and is building a rail line to the interior of South Carolina, where it will connect with the leading roads and will easily reach its timber tracts. The steamer line will carry lumber from Georgetown to the northern seaboard cities as far as Boston, the principal office being in New York. So far only two steamers have been ordered. One is building at the Craig yard in Toledo, to be ready July 15 next, and the other at the Union Dry Dock Co.'s yard in Buffalo. At present it is impossible to get more built for early delivery, but it is expected that each of these yards will be given another steamer. After that the coast yards will probably be ready for the work. The line is to consist of six steamers at present. The capital of the company is now fixed at \$1,000,000, but it will be increased if necessary. The business for the line is all ready for it as soon as the steamers are completed, and its earnings are quite assured.



**CLAIM AGAINST A STEAMBOAT COMPANY.**

One of the most novel law suits that has been put on trial for some time was started before Justice White and a jury in the Supreme Court at Buffalo last week. A. Leo Weill, a Pittsburg lawyer, seeks to recover \$26,135.50 damages from the Richelieu & Ontario Navigation Company, which runs steamboats between Clayton and Montreal on the St. Lawrence river, because the company's steamer Algeria departed from Clayton 10 minutes ahead of schedule one day on August 11, 1897, and compelled him to wait over in that place 24 hours.

Weill is represented by Attorney Simon Fleischman of Buffalo. He claims he lost 24 hours' time, \$10.50 he paid for two tickets, \$20 loss on a hotel bill, services for a day at \$100, discomfort and annoyance in the sum of \$1,000 and "exemplary, punitive or vindictive damages" in the sum of \$25,000.

He alleges that the reason for the premature and untimely departure of the boat was that the captain had had an altercation with a captain of a rival line of boats, and had started out ahead of time to try and run him down.

The company makes a general denial of most of the allegations, and asks that the complaint be dismissed. The exact nature of its evidence will not be made known until it begins to put in its defense. John W. Hogan of Syracuse and Charles F. Tabor of Buffalo are attorneys for the company.

The plaintiff also says that after the boat had departed he asked an agent of the company to hold it at Alexandria Bay and the agent telephoned to that place. Then Weill and about a dozen other people who were left started on another boat to catch the Algeria. As they were starting, Weill says, the defendant's agent ran to the dock and called him back, saying the captain was still angry and out of humor, and was in such a passion that he would not obey the orders of the company's agents.

**BUFFALO FIRE BOAT TO BE BUILT EAST.**

The contract for the building of Buffalo's new fireboat has been awarded to an eastern shipyard. When the Union Dry Dock Co. refused the contract, after it had been awarded, the board advertised for new bids. At the same time the board notified eight different ship building firms of the new advertisement, including in the number the Buffalo Dry Dock Co. There were but two answers to the advertisement. These were from the Racine Boat Manufacturing Co., Racine, Wis., whose bid was \$122,000, and the Crescent Ship Yard Co., Elizabethport, N. J., whose bid was \$91,000, the amount of the appropriation. Before awarding the contract the fire commissioners visited the shipyards of the company in order to assure themselves that the firm was reliable. They found over \$3,000,000 worth of work on their docks, including a Federal boat for New York harbor, six launches for the Russian government, and cruisers and torpedo boats for this Government. The Crescent Ship Yard Co. is the builder of the submarine boat Holland, the gunboats Annapolis, Josephine, Vixen, the lighthouse tender Mangrove, and many other well-known vessels. The contract, which was signed Jan. 31, calls for the delivery of the boat at the docks in Buffalo within six months from that date.

**THE BERTRAM SHIP BUILDING WORKS.**

The Bertram Ship and Engine Building Works Company, Toronto, have now under construction two steel, general cargo steamers, of similar dimensions, and sister ships in all other particulars. They are known to the builders as Nos. 35 and 36, the former of which is building to the order of J. R. Booth, Ottawa, Ont., and No. 36 is listed as being under construction for a syndicate.

The hull dimensions of these two steamers are: 257 feet over all, 24½ feet keel, 43 feet beam and 25½ feet molded depth. Engines, triple expansion; diameter of cylinders, 17, 28 and 46, by 32-inch stroke. Boilers, 13½ diameter and 12 feet in length. The Bertram Engine Works Company build the engines and boilers, as well as the hulls. The estimated cost of each craft is \$165,000, or a total for both of \$332,000.

ADVICES from Montreal report a rumor on the local Stock Exchange that the Standard Oil Company was endeavoring to obtain control of the stock of the Richelieu & Ontario Navigation Company, in connection with the extension of its trade along the St. Lawrence. There was considerable trading in the stock as the result, the price going up to 115, an advance of about five points since Saturday.

**OBITUARY.**

(ORRIN L. JENKS.)

Orrin L. Jenks, one of the best known men in marine business on the lakes, died at the family residence, Port Huron, on Monday morning, aged fifty-eight years.

Mr. Jenks was born in Birmingham, Mich. He went to Port Huron with his parents in 1858. In 1862 his father, William S. Jenks, and himself established the Phoenix Iron Works, which has been doing business ever since. A very successful industry was built up under the management of Mr. Jenks. A few years ago the Jenks Ship Building Company was organized, with William S. Jenks as president and Orrin L. Jenks as vice-president and treasurer. The deceased, however, has been practically the director of the company from the date of its organization. Under his direction, twelve wooden vessels and tugs have been built, and three steel vessels are now on the stocks, and will be completed in time for this year's season of navigation. It has always been Mr. Jenks' ambition to embark in the building of steel vessels, but soon after beginning work on those now in process of construction, he was taken ill, and was confined to his house for several months. No man in Port Huron during the past twenty-five years has given employment to more men than has Mr. Jenks.

He leaves a wife, two sons, William G. and Sidney J. Jenks, and one daughter, Mrs. Nellie Mason, of Detroit. The funeral was held from the family residence on Wednesday afternoon.

**THE RACINE BOAT MANUFACTURING CO.**

The Racine Boat Manufacturing Company is building two handsome little craft to the order of Mr. Tracy C. Drake and Mr. V. C. Seaver. The former is a 12-ton, schooner-rigged, steam yacht, 64 feet over all, 54 feet keel, 10 feet beam and 5½ feet molded depth. Engines, compound, 5, 10 by 8 inches stroke, and a water tube boiler. Mr. Seaver's craft has hull dimensions: 52 feet over all, 48 feet keel, 10 feet beam, and 5 feet 7 inches molded depth. Electro-vapor engine. Machinery and complete equipment furnished by the builders.

**THE MORLEY-LANDSDOWNE COLLISION.**

The trial of the W. B. Morley-Landsdowne collision case is being heard by Judge Swan at Detroit. The claim for \$75,000 libel made by the Morleys is the result of the sinking of that steamer last summer after a collision in the Detroit river with the Grand Trunk ferry steamer Landsdowne. The Morley Transportation Co. is represented by Harvey D. Goulder of Cleveland and P. H. Canfield of Detroit. The Grand Trunk and Wabash railways, the owners of the ferry are represented by Alfred Russell and John T. Shaw. Attorney Canfield made the opening address for the libellant Friday morning and was followed by Mr. Shaw for the defense.

The interesting feature of the case is that the direct claim of each of the contestants is an absolute contradiction of every detail of the claim of the other, neither admitting any detail of the case to be as the contracting party states. Judge Swan has a hard proposition before him in rendering his decision as to the facts in the case.

Attorney Canfield claims that the Landsdowne was passing down and failed to show the proper lights; that the Morley, as soon as the Landsdowne was sighted, blew two blasts, an indication that she would pass outside; that the Landsdowne then showed a red light and replied with one blast, a signal that she, too, would pass outside.

The Landsdowne defense is that the Morley failed to show her lights; that the Landsdowne whistled first her intention of passing outside and that the Morley answered with a similar signal and showed her lights too late. They also claim that the Morley was hugging the Canadian shore, which it had no right to do in passing up; that under the rules established by Congress vessels passing up or down must look out for ferries crossing the river, giving them the right of way. A cross-claim for damages will be made.

THE Union Steam Pump Company, of Battle Creek, Mich., recently placed nine of their Burnham make of pumps with the N. K. Fairbanks Co., of Chicago; and also put in for the Hammond Packing Co., of South Omaha, Neb., one of their pumps for handling hot water, of the Moore pattern.

A government surveying party began this week the work of taking detailed soundings of St. Mary's river channel for the proposed improvements of the waters between Lakes Superior and Huron. The survey will also include the proposed West Neebish channel. Work will be continued as long as the ice will permit.

**FLOTSAM JETSAM AND LAGAN.**

For the first time in the history of Menominee has the harbor entry list during the month of January been so large. Thirty-four entries were recorded during the month.

Engineer Louis Sebastian has been reappointed as chief of the steamer Kearsarge. Engineer Sebastian stands in the front rank among the engineers as an expert machinist.

Capt. Wall will have charge of the steamer Stephenson again next year. He made a fine record with the boat last summer and she cleared a large sum for her owners. The captain is the right man in the right place.—The Eagle, Marinette, Wis.

A dispatch from Kingston, Ont., says: Capt. Joseph Murray, who saved his tow of barges and beached the burning tug Bronson at Alexandria Bay last summer has been presented with a gold watch and chain by the Montreal Transportation Company.

For several days past the shipments of ore from the stock piles at the docks at both Ashtabula and Conneaut have been greatly affected by the cold weather. The orders for shipments to the furnaces are large, but the hard cold snap made work go very slow.

Fish from Lake Michigan have traveled thirty-four miles up Chicago's new canal. They seem healthy and happy in spite of the sewage poison which the canal is supposed to carry with it. A blue herring a foot long was caught, bottled and forwarded to St. Louis for a specimen.—Daily Times, Oswego, N. Y.

Capt. E. G. Ashley, Toledo, was elected secretary of the grand lodge of Shipmasters at its annual meeting in Buffalo. Capt. Ashley succeeds Capt. Collier, who is manager of the Northern Transit Company. Delegate William McKinley, from the Toledo lodge of Shipmasters, was elected sentinel at the Buffalo meeting.

Montreal's grain shipments for the navigation season recently closed were 31,591,551 bu., against 39,102,682 bu. in 1898. The decrease is attributed to the fact that the Grand Trunk hauled to and shipped from Portland, Me., over 6,000,000 bushels of grain, and to the withdrawal of a large number of the largest cargo carriers to be used as transports to South Africa. The great decrease was in corn.

Capt. Richard Jollie of Jefferson, who has commanded the steamer C. B. Lockwood since she came out in 1890, has been appointed master of the steamer Roman of the Menominee line for the coming season. This is the second change that Capt. Jollie has made during the 13 years of his life that he has been a lake captain. He sailed the steamer Geo. Spencer for three years before going into the Lockwood.—The Daily Beacon, Ashtabula.

Senator McMillan has introduced a bill in the Senate appropriating \$50,000 for a small revenue cutter to patrol the narrow passages of St. Mary's river and guard against the violation of the rules of navigation where such violation is certain sooner or later to result in accident, tying up commerce for days at a time. Congressman Sheldon has introduced the same bill in the House. It is expected that this cutter will be provided for on one of the appropriation bills.

Our valued contemporary, the New York Maritime Register, has raised its subscription price from \$25 to \$35 a year, on account of added improvements in its shipping news service and other important changes in the make-up of the paper. The Maritime Register even at double its present increased rate of subscription, would be sought for and its pages as eagerly scanned in Foo Chow-Foo as it is and has been for the past quarter of a century in every seaport of the world. The sun never sets where the Maritime Register is not known and read.

The naval officers who were on board the United States ship Nero, which made the preliminary survey for the location of a cable from Honolulu to Manila, report the discovery of the greatest known ocean depth. They also discovered a submarine mountain situated a short distance west of the Midway Islands, which rises from the ocean's bottom to within 492 feet of the surface. The deepest sub-marine abyss yet found in the world is situated about 500 miles eastward of Guam, and sinking to a depth of more than 4,900 fathoms (29,400 feet).

The House on Monday passed the bill presented by Representative Minor, providing a penalty for misrepresentation of facts in applications made for license as captain, mate or any other official position on board a vessel. The bill authorizes inspectors of steam vessels to administer an oath to all such applicants as to their experience and other requirements of the law, and for any misrepresentation, a fine of \$500 is imposed or imprisonment at hard labor for three years.—The Advocate, Sturgeon Bay, Wis. The bill has not quite passed, objection was made and the measure went over into oblivion we hope.—Ed.

The Secretary of War has transmitted to Congress the report of the preliminary examination and subsequent survey of Keweenaw harbor with a view of creating a harbor of refuge with a depth of not less than twenty feet. The report states that a harbor of refuge can be formed at a low cost compared with the cost of improving the exterior harbor, which, on account of the expense, is considered impracticable. A plan is presented for a formation of a harbor of refuge within the mouth of Keweenaw harbor by the extension of the pier 400 feet and by the construction of a breakwater 600 feet in length off the mouth of the harbor. The estimated cost of the improvement is \$230,000.



## Chicago Nautical School

1513 Masonic Temple,  
CHICAGO.

W. J. WILSON,  
(Late Lieutenant U. S. Navy),  
Principal.

A full and complete course of instruction in lake and ocean navigation. Also special branches taught those desiring to qualify themselves for better positions in the marine service. \$200 in prizes (Great Lakes Register) awarded annually to students. Students taught by correspondence. Students may begin at any time. Send for circular.

## Pintsch Gas Lighted Buoys.

Adopted by the English, German, French, Russian, Italian, and United States Light-House Departments for channel and harbor lighting. Over 800 gas buoys and gas beacons in service.



### Burn Continuously

from 80 to 365 days and nights without attention, and can be seen a distance of six miles.

Controlled by

**THE SAFETY CAR HEATING AND LIGHTING CO.**

160 Broadway, New York City.

## Capt. Samuel W. Gould,

265 MARCY AVE., CLEVELAND.

Gives instructions in Ocean Navigation and prepares candidates for the examinations for Master and Pilots' Licenses, before the Local Steamboat Inspectors.

— TAKE —

Wade Park or Payne Ave. Car.

## IMPORTANT TREASURY DECISIONS ON ST. MARY'S RIVER SAILING RULES.

RULES AND REGULATIONS GOVERNING THE MOVEMENTS AND ANCHORAGE OF VESSELS IN ST. MARY'S RIVER—AMENDED JANUARY 27, 1900.

An Act Relating to the anchorage and movements of vessels in St. Mary's river.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of the Treasury be, and he hereby is, authorized and directed to adopt and prescribe suitable rules and regulations governing the movements and anchorage of vessels and rafts in St. Mary's river, from Point Iroquois, on Lake Superior, to Point Detour, on Lake Huron, and for the purpose of enforcing the observance of such regulations the said Secretary is hereby authorized to detail one or more revenue cutters for duty on said river.

Sec. 2 That all officers of the Revenue Cutter Service who are directed to enforce the regulations prescribed by the above rules are hereby empowered and directed, in case of necessity, or when a proper notice has been disregarded, to use the force at their command to remove from channels or stop any vessel found violating the prescribed rules.

Sec. 3 That in the event of the violation of any such regulations or rules of the Secretary of the Treasury by the owners, master, or person in charge of such vessel, such owners, master, or person in charge shall be liable to a penalty of two hundred dollars, and the vessel, its tackle, apparel, furniture, and cargo, at any time used or employed in violation of such regulations, shall be forfeited to the United States: Provided, That the Secretary of the Treasury may remit said fine or release said vessel on such terms as he may prescribe: Provided, also, That nothing in this Act shall be construed to amend or repeal the Act entitled "An Act to regulate navigation on the Great Lakes and connecting tributary waters as far east as Montreal."

**RULE I.**—No vessel ascending or descending the St. Mary's river shall proceed at a greater speed than nine statute miles per hour over the ground between the Turning Channel Gas Buoy in the northern part of Mud Lake and the northern float lights in lower Hay Lake of the Twenty-foot Channel leading from Neebish Channel, nor between the Crib Light in Upper Hay Lake at the entrance of the Twenty-Foot Channel of the Frechette and Little Rapids Cut and the Government pier at Sault Ste. Marie, nor between the western end of Sault Ste. Marie Canal pier and Point Eaux Pins Light-House.

Vessels of 500 tons or less are exempt from the provisions of this rule.

**RULE II.**—No vessel shall pass or approach another vessel moving in the same direction nearer than a quarter of a mile between Everens Point and the northern end of the Dark Hole, nor between the first Black Spar Buoy south of the Gas Buoy in the northern part of Little Mud Lake and the northern float lights in lower Hay Lake of the Twenty-Foot Channel leading from Neebish Channel, nor between the southern entrance of the Twenty-Foot Channel of the Frechette and Little Rapids Cut and the Crib Light at the northern entrance of the Little Rapids Cut, nor between the western end of the Sault Ste. Marie canals piers and Big Point.

**RULE III.**—All vessels bound up the St. Mary's river may pass other vessels moving in the same direction between the Crib Light in the northern part of Mud Lake, and Everens Point in Little Mud Lake, between the northern part of the Dark Hole and the south Red Buoy at Stribbling Point; also between the Crib Light-House at the northern entrance of Little Rapids or Island Cut and the Government pier at Sault Ste. Marie, and between Big Point and the light-house at Pointe aux Pins. Vessels bound down the river shall not pass or approach other vessels moving in the same direction nearer than a quarter of a mile, from below Spry Dock at Sault Ste. Marie, until Everens Point is passed, excepting, however, in Hay Lake.

Vessels bound down, of less than five hundred gross tons without tows, may pass other vessels moving in the same direction in Little Mud Lake, provided the overtaking vessel shall pass to the westward of the black buoys and before reaching the Dark Hole.

No vessel passing another vessel shall move at a rate of speed greater than nine statute miles per hour over the ground.

**RULE IV.** All vessels navigating the St. Mary's river may proceed at full speed and pass other vessels moving in the same direction between Point Detour and the Turning Channel Buoy in the northern part of Mud Lake, between the northern float lights of the Twenty-Foot Channel leading from the Neebish Channel into Hay Lake and the Crib Light at the entrance of Frechette and Little Rapids Cut.

Special attention is called to Rule 24 of the act of Con-

gress approved February 18, 1895, giving right of way to descending vessels in the St. Mary's river.

**Rule V.**—In case one steamer desires to pass another going in the same direction on said river, at a point where such passing is permitted by these rules, the pilot of the steamer passing shall, if he intends to pass the steamer ahead on the right hand or starboard side, indicate such intention by giving one short blast of the steam whistle, and if he intends to pass such steamer ahead on the left hand or port side, he shall indicate such intention by giving two short blasts of the steam whistle. Upon the pilot of one steamer astern of another giving such signal, the pilot of the steamer ahead shall immediately answer by giving the same signal; but if he does not think it safe for the steamer astern to attempt to pass at that point, he shall immediately signify the same by giving several short and rapid blasts of the steam whistle; and under no circumstances shall the steamer astern attempt to pass the steamer ahead until such time as they have reached a point where it can be safely done, when said steamer ahead shall signify her willingness by blowing the proper signals, then the steamer ahead shall slacken to a slow rate of speed, and the steamer astern shall pass the overtaken steamer, giving the overtaken steamer as wide a berth as possible.

Steamers bound in opposite directions shall slow to half speed within one-quarter of a mile of each other until each has passed the other.

**Rule VI.**—The patrolling vessels of the Revenue Cutter Service shall always have the right of way over all other vessels, as indicated by the sailing signals given by any such patrolling vessel.

**Rule VII.**—Three distinct blasts of the steam whistle, when sounded from a patrolling vessel, will indicate that the vessel to which such signal is given is proceeding at too high a rate of speed, and such vessel must immediately moderate her speed accordingly.

**Rule VIII.**—Three long blasts of the steam whistle, followed by one short blast, when sounded from a patrolling vessel, will indicate that the vessel to which such signal is given must stop until further orders from the patrolling vessel.

**Rule IX.**—Two red lanterns, one above the other, hoisted on a patrolling vessel at night, will indicate to the vessel to which such signal is given that such vessel must stop and not proceed farther toward the position where such lights are displayed.

**Rule X.**—No vessel or raft shall anchor in any of the improved channels now abreast of the Government piers at Sault Ste. Marie, except in distress or during a fog, and any vessel so anchored must always shift her anchorage when so directed by the officer in charge of a patrolling vessel to the spot designated by such officer.

**Rule XI.**—Vessels navigating the St. Mary's river may anchor between Point Detour and Mud Lake Turning Buoy, and at Sailors' Encampment close to the wharves of the saw-mill; in Hay Lake between the Neebish and Little Rapids Channel outside of the channel, as indicated by the ranges. But nothing in this rule shall be construed to prohibit any vessel from lying alongside of any wharf in said river.

**Rule XII.**—Rafts being towed in the St. Mary's river will be required to use what is termed the "Old Channel." From Harwood Point to Mud Lake Turning Buoy they will move at the time designated by the officer in charge of the patrolling vessel. When lying by they must be moored out of the channel.

**Rule XIII.**—In navigating the St. Mary's river, in all cases where the foregoing rules are not applicable, the attention of masters and pilots is called to the sailing rules contained in the act of Congress of February 8, 1895.

**Rule XIV.**—All vessels navigating the St. Mary's river, in passing dredges and vessels at work on improvements to the channel, will be required to slacken their speed upon such dredge or other vessels engaged in such improvement giving the signal of three distinct blasts of the steam whistle.

**Rule XV.**—The pilot of every steamer descending the St. Mary's river shall, when abreast of the Dark Hole Gas Buoy, and before passing around the bend of said river at Sailors' Encampment, give a signal of one blast of the steam whistle of ten seconds' duration, which signal shall be answered by a blast of the steam whistle of the same duration by any vessel ascending said river within hearing. The pilot of

every steamer ascending said river, not having heard such signal from a descending steamer, shall, when abreast of Everens Point, and before passing around the bend of said river at Sailors' Encampment, give a signal of one blast of the steam whistle of ten seconds' duration, which shall be answered by a blast of the steam whistle of the same duration by any vessel descending said river within hearing. After such signal of one blast of the steam whistle of ten seconds' duration shall have been given and answered, the usual passing signal must be given.

**Rule XVI.**—Any steamer approaching a tug towing a dredge or scow moving in the same direction may pass such tow by giving the proper signal indicating upon which side of such tow such steamer will pass, and it shall be the duty of the pilot of any such tug to sheer on the side of the channel indicated by such passing signal and give the passing steamer all possible room.

**Rule XVII.**—No steamer stemming the current through the Dyke and Island Cut shall be allowed to tow more than one vessel without the aid of a tug, unless such steamer has the power to move the tow over the ground at the rate of at least 3 miles an hour.

**Rule XVIII.**—Whenever vessels are compelled, by reason of an obstruction in any of the channels of the St. Mary's river to collect in certain parts of the river, the revenue cutter officer in charge shall direct where such vessels shall be moored and anchored, and no vessel moored or anchored, by reason of such obstruction, shall move until directed by the revenue cutter officer in charge.

**Rule XIX.**—Whenever at Johnston's Point, Sailors' Encampment, a red ball is displayed under a white ball, or two red lights are displayed under a white light, indicating that a steamer with a tow is bound down, no steamer with a tow bound up below Johnston's Point shall meet or pass the bound down tow until the bound down tow has passed clear of Johnston's Point.

### SIGNALS AT JOHNSTON'S POINT.

Whenever a steamer bound down the St. Mary's river in the daytime enters the Dark Hole a white ball will be displayed on a pole at Johnston's Point, Sailors' Encampment, in said river, until the steamer is abreast of Johnston's Point, and whenever a steamer having a vessel or vessels in tow bound down in the daytime enters the Dark Hole, a red ball will be displayed under the white ball on the pole until the steamer is abreast of said point.

Whenever a steamer bound down said river at night enters the Dark Hole, a white light over a red light will be displayed on said pole; and whenever a steamer bound down said river at night having a vessel or vessels in tow enters the Dark Hole, a white light with two red lights under it will be displayed on said pole.

No flags or lanterns, however, will be displayed for tug-boats without tows or for small vessels.

### SCHEDULE OF TIME TO BE RUN IN CERTAIN PARTS OF ST. MARY'S RIVER.

For the facilitation of speed calculations in connection with the Rules and Regulations governing the Movements and Anchorage of Vessels in St. Mary's river, the Department publishes the following schedule of distances between certain points along the St. Mary's river, together with the time required to run those distances at a speed of nine miles an hour:

### SCHEDULE OF DISTANCES.

SECTIONS	Distance in statute miles.	Time in minutes
Mud Lake Buoy to Everens Point	2 $\frac{3}{4}$	17 $\frac{1}{2}$
Everens Point to Encampment Crib Light	3 $\frac{1}{4}$	5
Encampment Crib Light to Dark Hole Turn	1 $\frac{3}{8}$	11
Dark Hole Turn to Harwood Point Turn	3 $\frac{3}{4}$	21 $\frac{3}{4}$
Harwood Point Turn to Junction Buoy, Hay Lake	3 $\frac{3}{4}$	21 $\frac{3}{4}$
Junction Buoy to Upper Lights, Lower Cut	2 $\frac{3}{4}$	18 $\frac{3}{4}$
Lower Cut to Frechette Cut, full speed	1 $\frac{1}{2}$	10
Lower Range, Frechette Cut, to Red Can Buoy	1 $\frac{1}{2}$	10
Red Can Buoy to Lower Light, Little Rapids	1 $\frac{1}{2}$	10
Lower Light to North Entrance Light House	1 $\frac{1}{2}$	11
No. 10 Entrance Light-House to Government Pier	2 $\frac{1}{4}$	15
West end of piers to Big Point	3 $\frac{1}{4}$	21 $\frac{3}{4}$
Big Point to Point aux Pins Light-House	1 $\frac{1}{2}$	7 $\frac{1}{2}$
Through Dike	1 $\frac{1}{2}$	7 $\frac{1}{2}$
Through Island Cut		
Least towing time allowed vessels bound up through Dike and Island Cut		27 $\frac{1}{2}$



Capt. A. B. Davis, R. C. S., commanding U. S. steamer Morrill, will, until otherwise ordered, have supervision of the enforcement of the foregoing rules and regulations, and all complaints or appeals arising under them will be made to that officer by parties concerned.

O. L. SPAULDING, Assistant Secretary.

### MORE OHIO CANALIZING.

The resolution introduced in the Senate at Columbus, on Thursday last, to give Ohio a deep water-way reads as follows:

Whereas, The commercial interests of western Ohio, as well as the territory contributory to the Great Lakes and the Ohio and Mississippi rivers, imperatively demand the immediate improvement and enlargement of the Miami and Erie canal from Toledo to Cincinnati as a ship canal, to supply the only missing link in the great highway of trade between our inland seas and the gulf; therefore, be it

Resolved, By the General Assembly of the State of Ohio, that the Congress of the United States be and hereby is memorialized to take such action in the premises as the importance of the enterprise demands, looking to the early construction of this great thoroughfare for the productions of the richest and most prosperous section of our country. Be it further

Resolved, That the governor is hereby requested to forthwith forward to both branches of Congress and to each Senator and member of Congress from Ohio, certified copies of this resolution.

### ASTRONOMICAL DATA FOR FEBRUARY.

Astronomical data for February 1900, furnished THE MARINE RECORD by the Washburn observatory:

Mercury passes through superior conjunction Feb. 9, and may be seen as a low evening star, the last few evenings of the month, if the atmosphere be very clear. Venus continues to appear higher in the south-western sky as the brilliant evening star. The disk is now a little more than three-quarters illuminated, so that in the telescope the planet appears like a moon between first quarter and full. The planet is increasing its apparent brilliancy more rapidly as its orbital motion brings it nearer the earth. Jupiter is the brightest star in the morning sky, and is seen in the south-east, reaching the meridian at about the time of sunrise. It is followed by Saturn, which is seen in a lower position in the south-western sky. Mars is still too near the sun for observation.

The times of sunrise and sunset at Milwaukee for the month are as follows:

	SUNRISE.	SUNSET.
Feb. 1.....	7:08	5:04
" 11.....	6:56	5:17
" 21.....	6:41	5:30
" 28.....	6:30	5:39

The times of the moon's phases are:

First Quarter.....	Feb. 6, 10:23 a. m.
Full moon.....	" 14, 7:50 a. m.
Third Quarter.....	" 22, 10:44 a. m.

The principal fixed stars visible during the month in the evening hours are:

To the west, Aldebaran, the Pleiades, Capella, and the bright stars of the constellations Andromeda and Cassiopeia. Near the meridian, Sirius is the brilliant stars of the constellation Orion. To the east Procyon, Regulus and Castor and Pollux.

ALEXANDER R. SMITH, Commerce Commissioner of the State of New York, and widely known in maritime circles throughout the country, has been appointed special expert in charge of the department of shipbuilding for the twelfth census.

### SHIPPING AND MARINE JUDICIAL DECISIONS.

(COLLABORATED SPECIALLY FOR THE MARINE RECORD).

**Determining Fault—Effect of Negligence.**—Independently of the question whether or not the want of a proper lookout contributed to a collision, the fact of negligence in that respect necessarily weighs with great force against the vessel thus negligent in determining questions of fact in dispute where the testimony cannot be reconciled. The Samuel Dillaway, 98 Fed. Rep. (U. S.) 138.

**Award of Damages—Review on Appeal.**—The settled rule of the federal courts that successive decisions of two courts in the same case on a mere question of fact are not to be reversed, unless clearly erroneous, is applicable to the report of a commissioner in admiralty fixing the damages resulting to a vessel from a collision, which has been confirmed by trial court. The Providence, (U. S.) 133.

**Defective Dock.**—Where a timber on plaintiff's dock is fastened securely for the purpose for which it is intended, but in mooring a vessel it is misplaced, the fact that its fastening is insufficient when it is put to a use other than that for which it is intended, does not charge the plaintiff with contributory negligence. Pittsburgh & C. Dock Co. vs. Detroit Transp. Co., 81 N. W. Rep. (Mich.) 269.

**Principal and Agent.**—Where the line, the negligent handling of which caused the accident, was brought from defendant's steamer, it was not error to charge the jury, in effect, that, if the line was handled by a man who slid down from the steamer, that man was an agent of defendant, and his negligence is imputed to defendant. Pittsburgh & C. Dock Co. vs. Detroit Transp. Co., 81 N. W. Rep. (Mich.) 269.

**Collision—Determining Fault—Vessel Violating Statutory Rules.**—The rule applied that a steamer violating the statutory rules, by proceeding at an unlawful rate of speed in a fog, in connection with which violation a collision arises, to clear herself from liability must show, not merely that such violation was probably not one of the causes of the collision, but that it could not have been. The Providence, 98 Fed. Rep. (U. S.) 133.

**Negligence of Agent.**—An accident happened from the manner in which the mooring line of defendant's steamer was handled on plaintiff's dock. The man handling the line was an employee of plaintiff, but performed the service in question at the request of the captain of defendant's steamer, such duty not being in the line of his regular employment. Held, that he was the agent of defendant, and his negligence must be imputed to it. Pittsburgh & C. Dock Co. vs. Detroit Transp. Co., 81 N. W. Rep. (Mich.) 269.

**Measure of Damages—Demurrage.**—The fact that there is no means by which to determine the charter value of a vessel injured by a collision, or that the owner has another vessel by which she is at once replaced, does not prevent the allowance of demurrage for the time she is laid up for repairs; and where she would have been engaged in making regular trips, that damages may be computed on the basis of her average earnings. The Cuyahoga, 14 Wall, 270, followed. The Providence, 98 Fed. Rep. (U. S.) 133.

**Collision—Vessels Crossing—Care Required of Tug with Tows—Lookouts.**—A tug having three tows on a single line, covering altogether about 3,000 feet in length, is bound to use extreme care, in navigating the ocean at night, to avoid collisions, and may be required by the conditions to maintain a lookout aft as well as the regular lookout in the bow. Such a tug will be held in fault for a collision of one of the tows with a sailing vessel crossing, which might have been, but was not seen in time for the tug to have passed astern of her. The Samuel Dillaway, 98 Fed. Rep. (U. S.) 138.

### THE FRENCH RIVER ROUTE.

Since the announcement that the Canadian government intends making a deep ship channel from Georgian Bay to Lake Nipissing, utilizing French river for the route, transportation men have become much interested in the project. By this route the Canadian Pacific Railway Company would gain considerable advantage in forwarding western produce to the seaboard.

T. G. Shaughnessy, president of the C. P. R., states that his company will probably assist the government in the work. Of the project he says that it would not be very difficult to make French river navigable for large steamers. Only three locks will be required to be built, as in other places the river is very navigable and deep. The distance from Duluth to Montreal will by this route be over 300 miles shorter than by the Welland and St. Lawrence canals route, and about 180 miles less than by the Canada-Atlantic steamer and rail route via Parry Sound.

Mr. Shaughnessy says his company will likely erect three large grain elevators on Lake Nipissing, and have now an option on the land required. At the proposed sites there is solid rock surface, making the best of foundations for elevators.

It is understood that the Canadian Pacific will put on this route a fleet of five vessels, and probably more, as the traffic demands. A sequence to this project will be the double-tracking of the road from North Bay to Carleton Place, as this portion of the main line could not with a single track handle the large quantities of grain that would naturally have to be forwarded to Montreal when the route was opened. It is said that the \$2,000,000 voted at a recent meeting of the Board of Directors for improvements and extensions of the line will be applied to the double-tracking referred to. From Carleton Place to Montreal there are two lines.

### NAUTICAL INSTRUMENT MAKERS.

The firm of John Bliss & Co., 128 Front Street, New York, makers of nautical instruments of all descriptions, have just issued the fifty-eighth annual edition of their abridgment of the Nautical Almanac. The book is a compilation containing but little of what may be termed strictly original matter. The arrangement and classification of the work, however, is compiled according to the well considered views of the publishers, and is such that others have imitated and copied the collaboration.

Mr. John Bliss, grandfather of the present member of the firm began the chronometer-making business in New York in 1835, or 65 years ago, being senior member of the firm of Bliss & Creighton. He issued his first Nautical Almanac, a very simple and primitive affair, in 1839. As the U. S. Government nautical ephemeris was not then in existence, he obtained his astronomical data from the British almanacs, and continued to do so for several years, or, until the American office was established, since which time the necessary data has been secured at home. The firm of John Bliss & Co. have now in their possession a copy of the 1839 Almanac and an almost unbroken file of the subsequent issues, though a few of the earlier editions are, unfortunately, missing.

"At every port in the Lake Erie district," said an engineer's assistant, "you will find a river. The current of this and the northeast and northwest winds which are prevalent, have a tendency to fill up the channels, which will continue until the government has the breakwaters established." Then we suppose that the silting will go on somewhere around the breakwater.

The Captain's Blunder.—"I am very sorry to hear, Capt. Salter, that your wife left you so unceremoniously." "My mistake, sir, I took her for a mate, and she proved to be a skipper."

# S. F. HODGE & CO.

MARINE ENGINES,  
PROPELLER WHEELS,  
DECK HOISTERS,  
MARINE REPAIRS.  
312 ATWATER STREET,  
DETROIT, MICH.

## Chas. E. & W. F. Peck,

58 William Street, New York City.

Royal Insurance Building, Chicago, Ill.

C. T. BOWRING & CO.

5 and 6 Billiter Avenue, E. C.,

London, England.

## Insurance

BROWN & CO., - - - 202 Main Street, Buffalo, N. Y.  
PARKER & MILLEN, 15 Atwater Street, W., Detroit, Mich.  
J. G. KEITH & CO., - 138 Rialto Building, Chicago, Ill.  
LA SALLE & CO., Board of Trade Building, Duluth, Minn.

Are prepared to make rates on all classes of Marine Insurance on the Great Lakes, both CARGOES AND HULLS.

## The Salvage Association of North America.

INCORPORATED 1899.

AN ASSOCIATION FOR THE PROTECTION OF UNDERWRITERS' INTERESTS AS REGARDS WRECKED AND DAMAGED PROPERTY AT SEA.



Application for the services of surveyors of this Association may be made to either the Chicago or New York offices.

Chicago Office,  
ROYAL INSURANCE BLDG.

New York Office,  
MUTUAL LIFE INS. CO. BLDG.



# Prominent Fueling Firms==Docks and Lighters.



## Steamboat Fuel at Chicago.

YOUGHIOGHENY and  
LEHIGH COAL CO.  
J. T. CONNERY, Manager. ARCHIE J. HITCHCOCK, Dock Supt.  
MAIN OFFICE: 1238-1242 Chicago Stock Exchange Building.  
Long Distance Telephone, Main 5049. 110 LA SALLE STREET.  
No. 1, Michigan Slip and Basin. Phone 3046, Main.  
No. 2, N. Halstead St. Bridge. Phone 773, North.

**FUEL DOCKS:**  
**FUEL LIGHTER:**

Equipped with 125 2-ton Buckets for  
Fueling anywhere in Harbor

WE PRODUCE OUR YOUGHIOGHENY



## Steamboat Fuel at Cleveland.

THE PITTSBURGH &  
CHICAGO GAS COAL CO.  
J. A. DONALDSON, Manager. N. J. BOYLAN, Fuel Manager

OFFICE: 420-421 PERRY-PAYNE BUILDING.  
TELEPHONE, MAIN 1888.

No. 1, River Bed, through Valley R. R. Bridge. Telephone,  
No. 2, Main River, Foot of West River Street. West 190.

**FUEL DOCKS:**  
**FUEL LIGHTER:**

300 Tons Capacity; Fuel Anywhere in the Harbor.

COAL, AND GUARANTEE QUALITY.

## PICKANDS, MATHER & CO.

PIG IRON.  
IRON ORE AND COAL.

**FUEL LIGHTERS**

AT BUFFALO,  
ERIE,  
ASHTABULA,  
AND CLEVELAND.

At DETOUR, MICH., A FUEL DOCK equipped with  
Shute capacity of 600 Tons.  
Best Quality PITTSBURGH COAL furnished at any  
time during Day or Night.

WESTERN RESERVE BUILDING, CLEVELAND, O.

## M. A. HANNA & CO.

COAL, IRON ORE AND PIG IRON.

Steamboat Fuel at Ashtabula.

Large Supplies of Best Quality.

Fuel scow with elevators and discharging  
spouts. Storage of 650 tons. Discharges  
150 tons an hour into steamers while  
unloading cargo.

**LIGHTER**

carrying different grades  
at all times.

MINERS AND SHIPPERS.

MAIN OFFICE, Perry-Payne Bldg., Cleveland, O.

## Youghiogheny River Coal Co.

MINER AND SHIPPER OF

**OCEAN MINE COAL.**  
YOUGHIOGHENY  
GAS AND STEAM

General Office:

Erie, Pa. Long Distance Phone 409.

Shipping Decks:

Ashtabula, O. Long Distance Phone 76.

**VESSELS FUELED AT ALL HOURS**

WITH OCEAN COAL ONLY,  
BY STEAM LIGHTER OR CAR DUMP

ELECTRIC LIGHT.

THE W. L. SCOTT COMPANY,

ERIE, PA.

Shamokin-Wilkes Barre ANTHRACITE.

Youghiogheny, Mansfield, PITTSBURG.

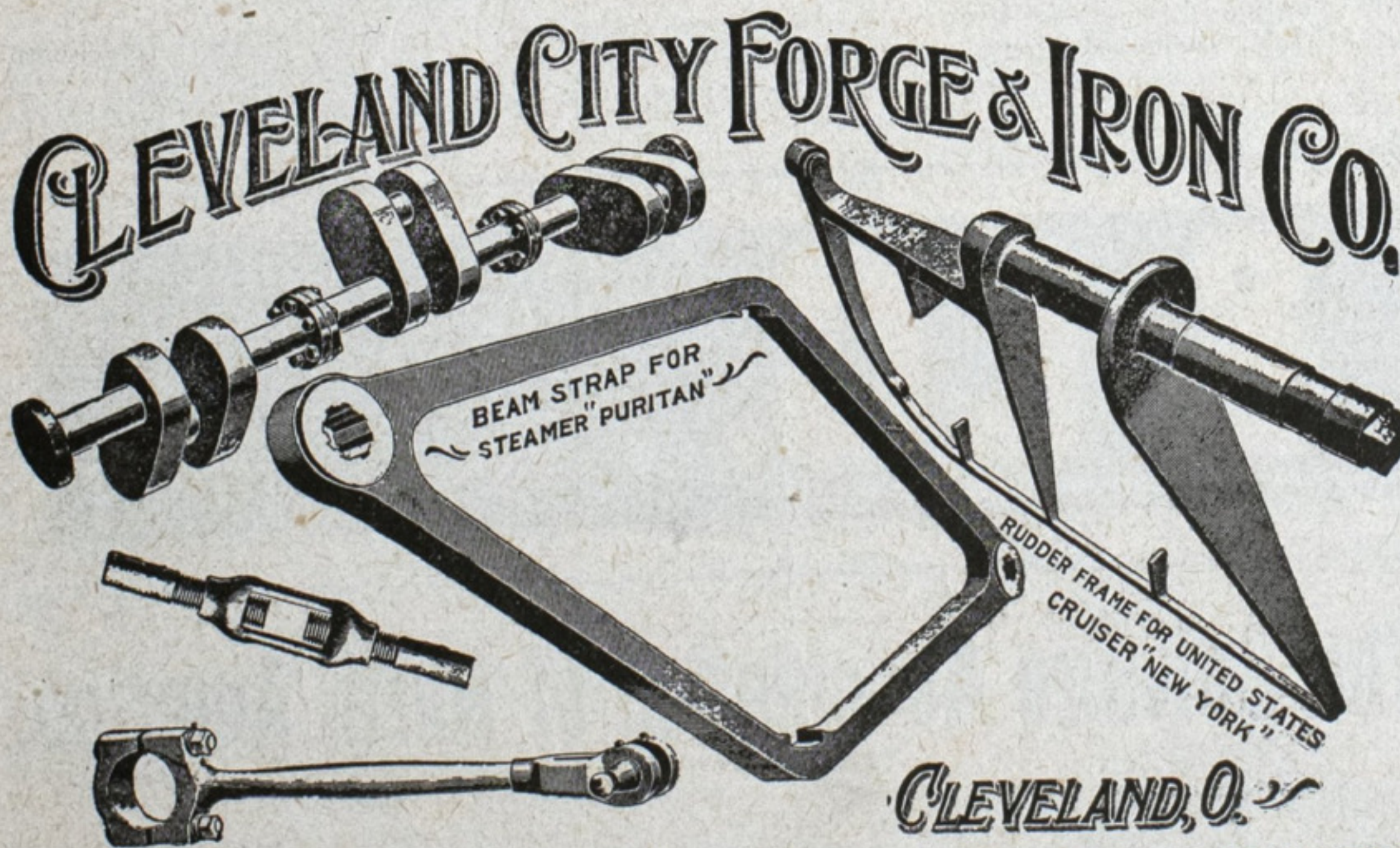
Vessel Fueling a Specialty

by steam lighter or car dump.  
at all hours. Electric light.

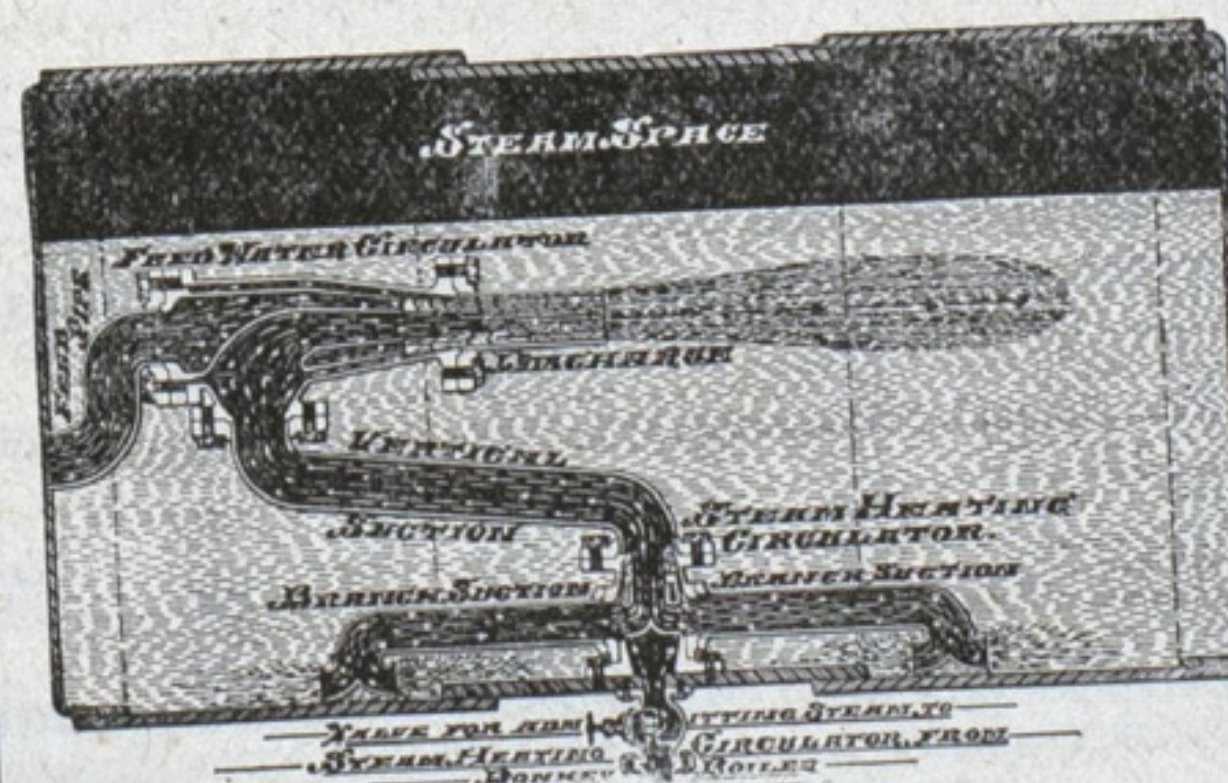
...Coals

MAIN OFFICE: SCOTT BLOCK. LONG DISTANCE 'PHONE 440.

FUELING OFFICE: CANAL DOCK. LONG DISTANCE 'PHONE 320.



IRON OR STEEL FORGINGS FINISHED COMPLETE, ROUGH MACHINED OR SMOOTH FORGED ONLY, OF ANY WEIGHT.  
COUPLING LINKS AND PINS. PRESSED WROUGHT IRON TURNBUCKLES. CAR IRON SPECIALTIES.



Section of Apparatus in Boiler.

## THE EQUILIBRIUM CIRCULATOR AND STEAM HEATING ATTACHMENT

Saves coal or increases steaming capacity  
five to fifteen per cent.  
Prevents foaming or priming or pitting  
Reduces repairs. Saves leaks.  
Prolongs life of boiler

106 IN USE.

50 ORDERED.

H. BLOOMSBURG & CO.

112 35th St, Newport News, Va.

## F. H. OSBORN & CO.

MARINE INSURANCE BROKERS,

Long Distance Telephone, Harrison 1586.

12 Sherman St., CHICAGO.

## PATENTS

Procured on Inventions  
and Designs. Labels,  
Prints and Trade Marks  
Registered

Sixteen Years' Experience.

D. W. RISHOP - Washington, D. C.

Central Passenger Association mileage  
tickets are good on the Nickel Plate road  
between Buffalo and Chicago or intermediate  
stations on and after February 10th. 19-6

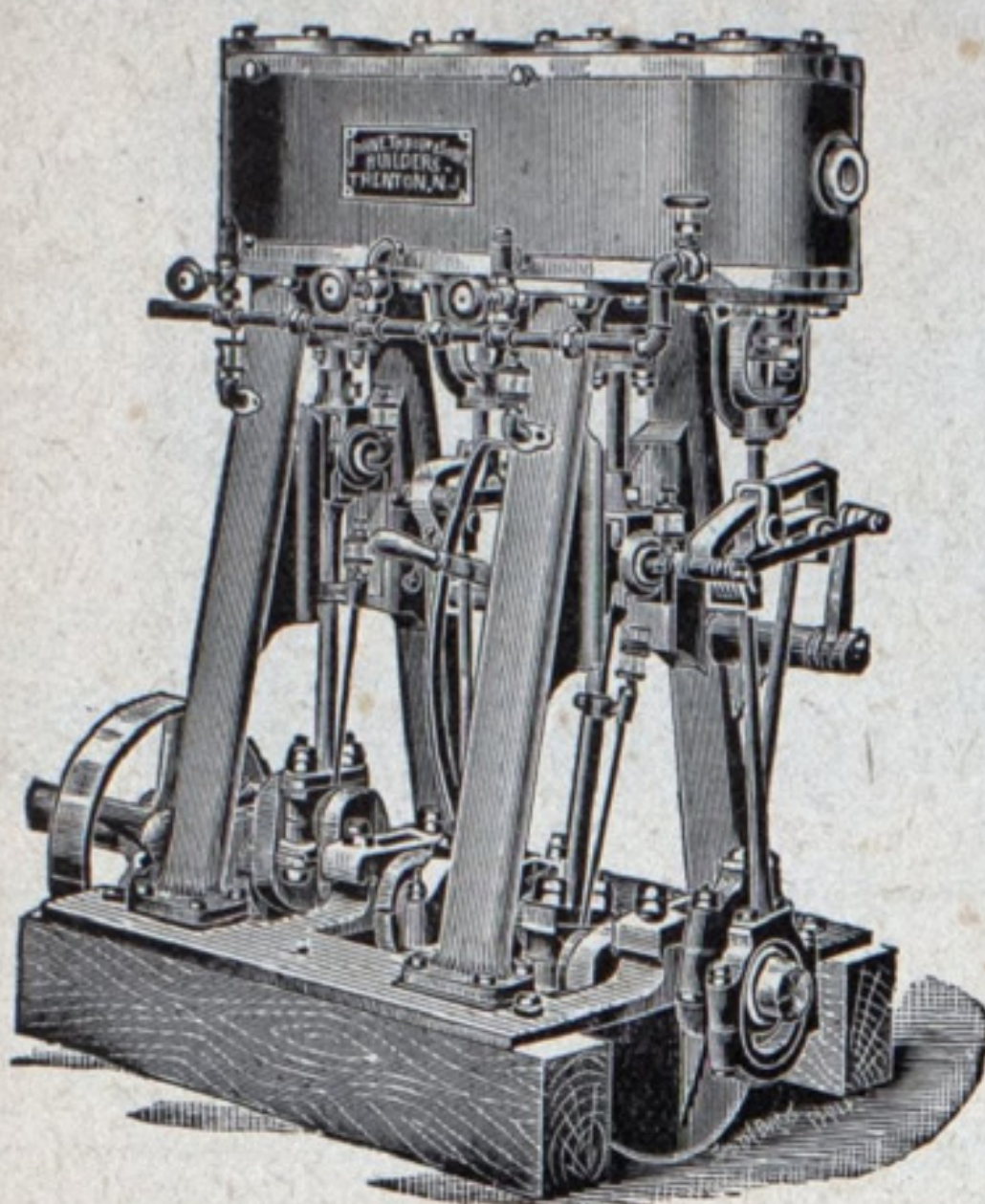
## PRACTICAL MECHANICS.

Applied to the requirements  
of the sailor. By Thos. Mc-  
Kenzie. Illustrated; 12 mo.;  
cloth, \$1.50, by mail prepaid.  
The Marine Record, Western  
Reserve Bldg., Cleveland, O.

If you hold a Central Passenger Associa-  
tion mileage ticket use it on trains of the  
Nickel Plate road on and after February  
10th.



# John E. Thropp & Sons' Co.

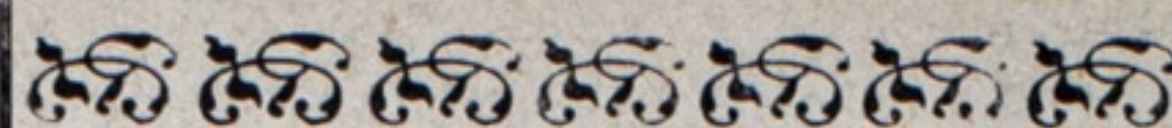


BUILDERS OF  
Compound and Triple Expansion  
**ENGINES,**

Boilers, Surface Condensers, Propeller  
Wheels, Etc.

Contracts taken for yachts and tugs  
complete. Send for photographs of En-  
gines and descriptive pamphlet.

Works on Delaware & Raritan Canal Basin.  
**TRENTON, N. J.**



## Ship Yard for Sale.

The well-known yard and dry dock at New  
Baltimore, New York, fifteen miles below  
Albany. Has one large marine railway,  
steam saw and planing mill, timber slip,  
mould loft and all necessary facilities for the  
business; plenty of room for sliding off  
either side of dry dock for repairs or build-  
ing new vessels; has a water front of 500  
feet, with docks and buildings in good re-  
pair; well equipped and good facilities for  
getting timber by water or rail. This yard  
has done a prosperous business for many  
years. All in first-class order. Good rea-  
sons for selling. Terms easy. A good  
opportunity for the right party. For full  
particulars and terms address the owner,  
Wm. H. Baldwin, New Baltimore, Greene  
County, N. Y. 47-8

# SHERIFFS MFG. CO.

ESTABLISHED 1854.



**MILWAUKEE, WIS.**



## The KENNEY FLUSHOMETER

FOR FLUSHING WATER CLOSETS.

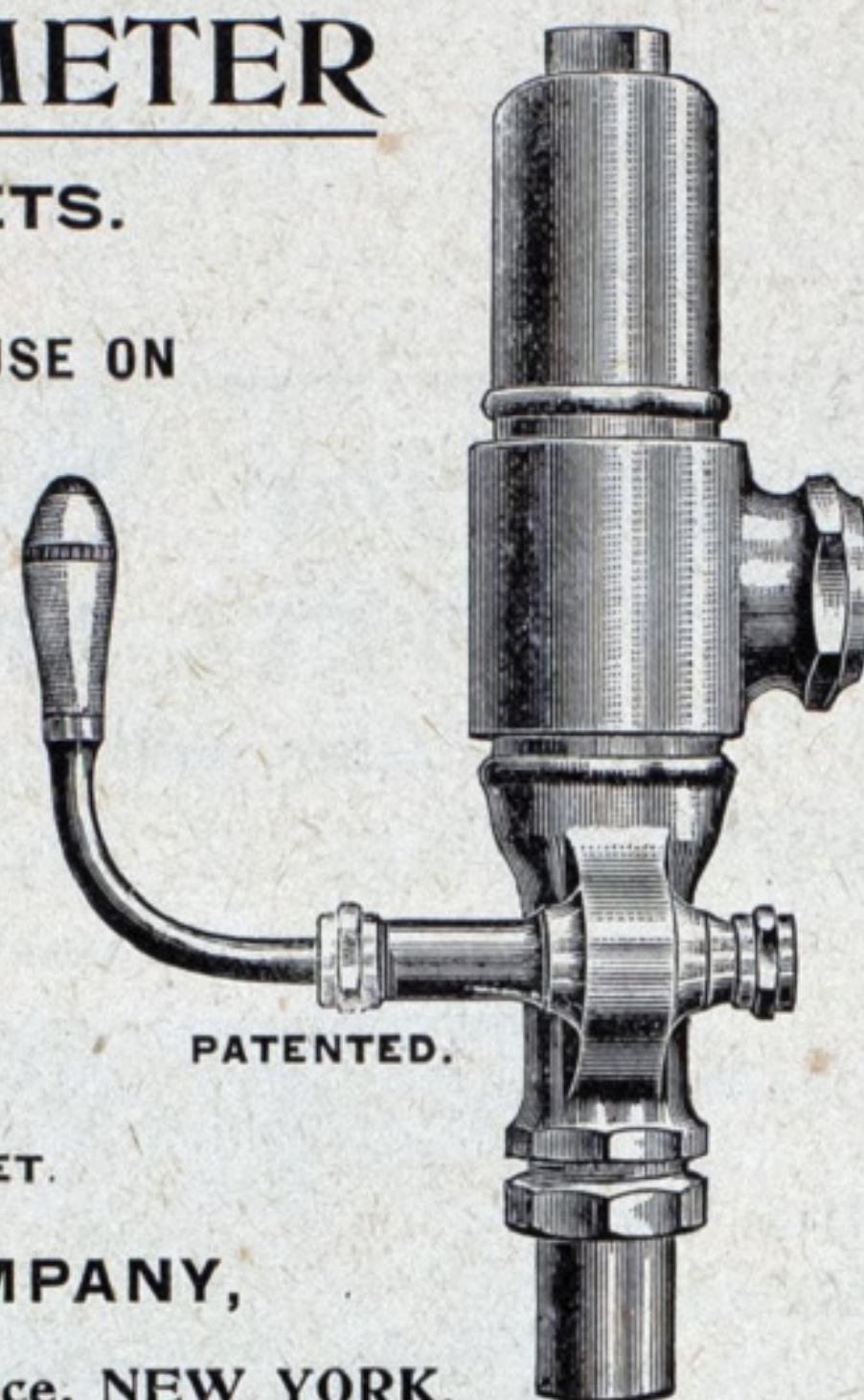
No Cup Leathers or Springs.

THE BEST SYSTEM EVER INVENTED FOR USE ON  
STEAM VESSELS.

Owners and constructors of Steamships, Yachts and  
Steamboats have found it indispensable. Used by  
the U. S. War and Navy Departments. Transports  
Grant, Sheridan, Burnside, Ter-  
ry, Hooker, Thomas, Sedge-  
wick, Meade, McClellan, Sher-  
man, Crook. Also Albany Day  
Line Steamers and others.



Showing application of  
Flushometer.



PATENTED.

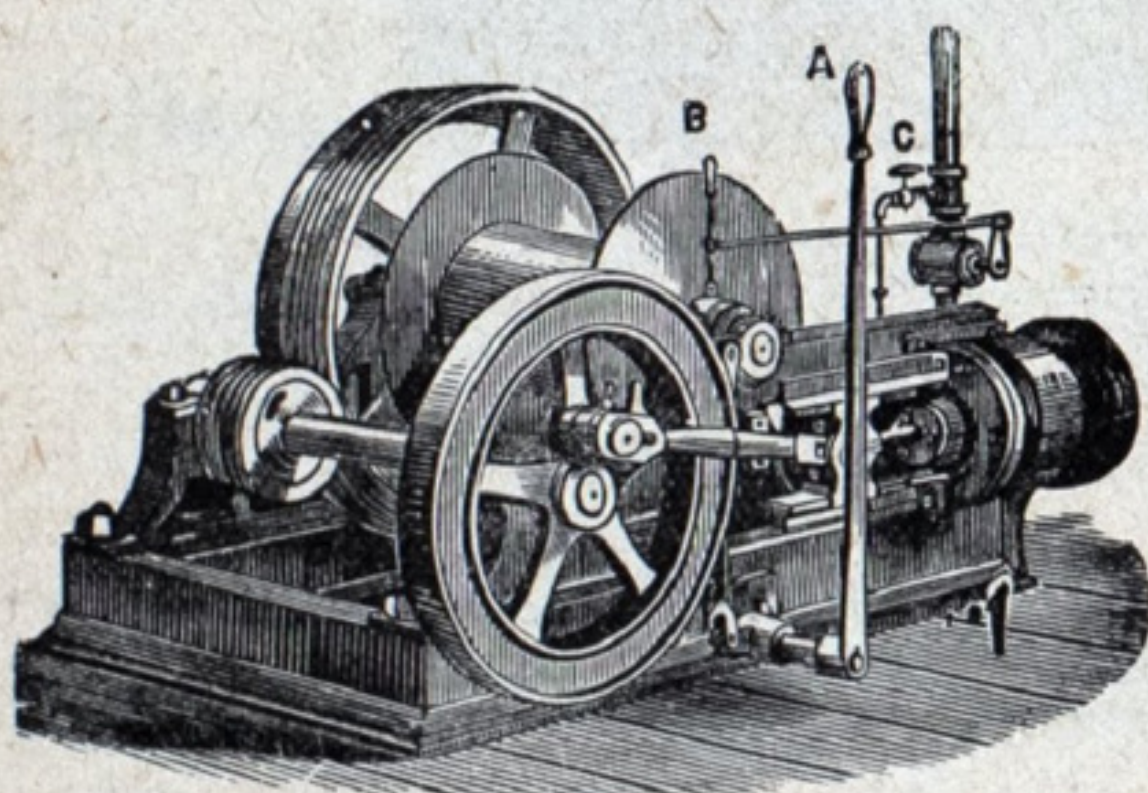
SEND FOR ILLUSTRATED PAMPHLET.

**THE KENNEY COMPANY,**

72-74 Trinity Place, NEW YORK.

## WILLIAMSON BROS.

COR. RICHMOND AND YORK STS.,  
Philadelphia, Pa.



**HOISTING and SHIP ENGINES  
STEERING ENGINES.**

With either Fractional, Spur or Worm Gear of  
Various Patterns to Suit all Purposes.

### Compasses Adjusted

For deviation, and deviation  
tables supplied. Great facilities  
for doing the work by day or  
night.

**John Maurice.**

Office, 24-26 Market St., CHICAGO.  
Residence, 1213 Albany Avenue.

Scott's Coast Pilot for the Lakes.

Price, \$1.50.

For Sale by  
THE MARINE RECORD,  
Western Reserve Building, Cleveland.

JOHN DONNELLY, SR., PRES.  
JOHN DONNELLY, JR., VICE PRES.

H. B. FOLGER, TREAS.  
THOS. DONNELLY, SEC'Y.

## THE DONNELLY SALVAGE AND WRECKING CO., Ltd.

KINGSTON, ONT.

EXPERIENCED DIVERS, TUGS, STEAM PUMPS, ETC.,  
SUPPLIED ON SHORTEST NOTICE.

### NEVERSINK CORK JACKET AND LIFE BELT.

Warranted 24 lb. Buoyancy and full Weight of Cork, as required by U. S. Inspectors. Consolidated Cork  
Life Preservers. Superior to all others. Rings Buoys and Penders. SAFEST CHEAPEST.  
Approved and adopted by U. S. Board of Supervising Inspectors.  
Also adopted by the principal Ocean, Lake and River Steamer Lines as  
the only Reliable Life Preserver. Vessels and trade supplied. Send for  
Catalogue.  
Awarded four medals by World's Columbian Exposition.



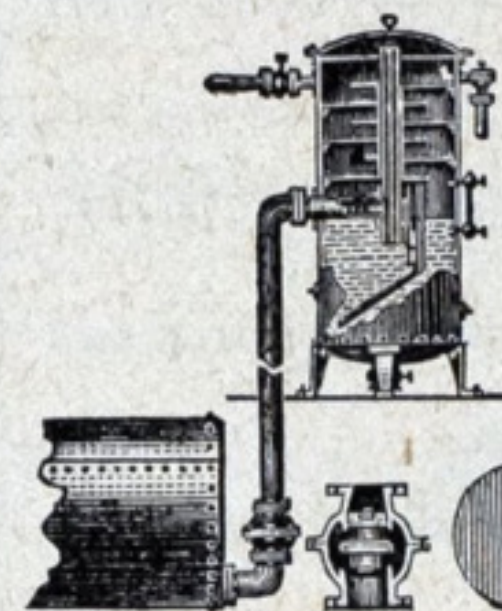
METALLIC  
and  
WOODEN  
LIFE  
BOATS.



Metallic Life Rafts, Marine Drags.

Manufacturer of Woolsey's Patent Life Buoy, which is the lightest,  
cheapest and most compact Life Raft known. Send for illustrated cata-  
logue. Get our prices before buying elsewhere.

**D. KAHNWEILER'S SONS, 437 Pearl St., New York City.**



## Buffalo Feed Water Heater AND PURIFIER.

Made in all Sizes and to Suit all Conditions.

**ROBERT LEARMONTH,**

200 Bouck Ave., BUFFALO, N. Y.

Send for Catalogue.



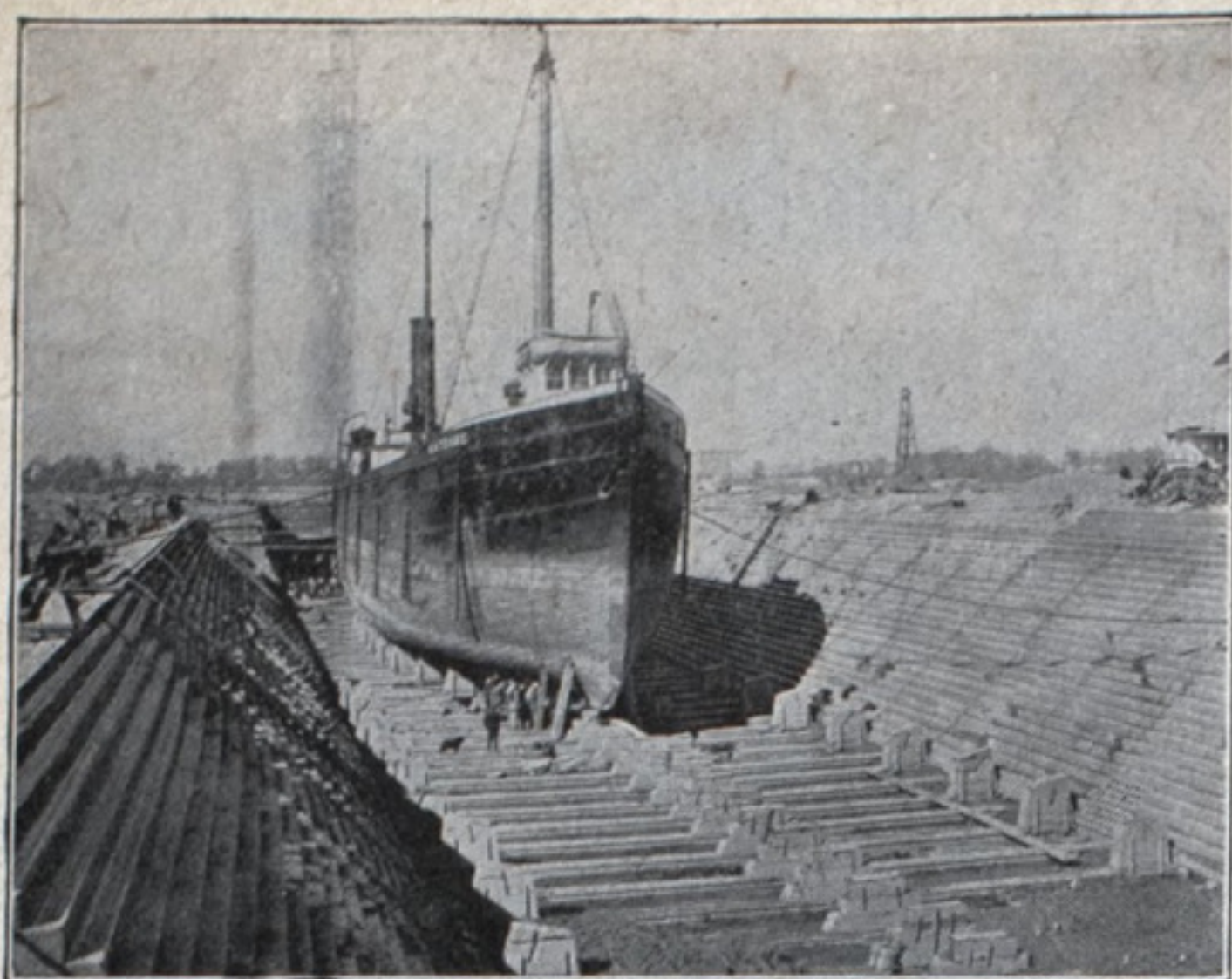
### Sellers' Restarting Injector

A strictly first class  
machine at moderate  
cost. Perfectly auto-  
matic, has wide  
range of capaci-  
ties, and raises  
water promptly  
with hot or cold pipes. Very simple,  
has few parts and is easily repaired.  
All parts interchangeable, made of the  
best bronze, and the workmanship is  
perfect. Send for special catalogue de-  
scriptive of this Injector.

JENKINS BROTHERS, Selling Agts.  
New York, Boston, Phila., Chicago.







# Craig Ship Building Co.

TOLEDO, OHIO.

New Dry-Dock 450 feet long, 110 feet wide on top, 55 feet wide on bottom, 16 feet water on sill.

Repairs to Metal and Wooden Ships  
a Specialty.

**Metal**  
and **Wooden**  
**Ship Builders.**



## Simpson Dry-Dock Co.

General Contractors and Consulting Engineers,

BUILDERS OF

## Simpson's Patent Dry-Dock,

35 BROADWAY, NEW YORK

## FOR SALE.

The hull of the steamer Andy Johnson, length 165 feet, beam 26 feet, depth 10 feet. This boat has been in dry dock, had bottom calked and repaired. With a small outlay this boat would make a barge with a capacity of 400,000 lumber, 700 tons coal. Could be changed a steam barge. Hull in good condition, now lying at this port. Price, \$1,700. We have also a customer who wants to buy a steam barge 400 M or better, lumber capacity; light draft, able to tow two barges of like size. Also a passenger boat, 6 feet draft, 10 mile speed; must be in good condition. Also two tow barges 700 to 800 M lumber. If you want to buy make your wants known, or have anything to sell quote price and terms to us and we will try and get you a customer. Also two fine farms on St. Clair river for sale. Fire insurance at the lowest rates.

KENDALL MARINE REPORTING CO., Port Huron, Mich.

LIFE BOATS.

YAWLS.

LIFE RAFTS.

## DETROIT BOAT WORKS

DETROIT, MICH.

STEEL, IRON AND WOODEN TUGS.

STEAM AND SAIL YACHTS.

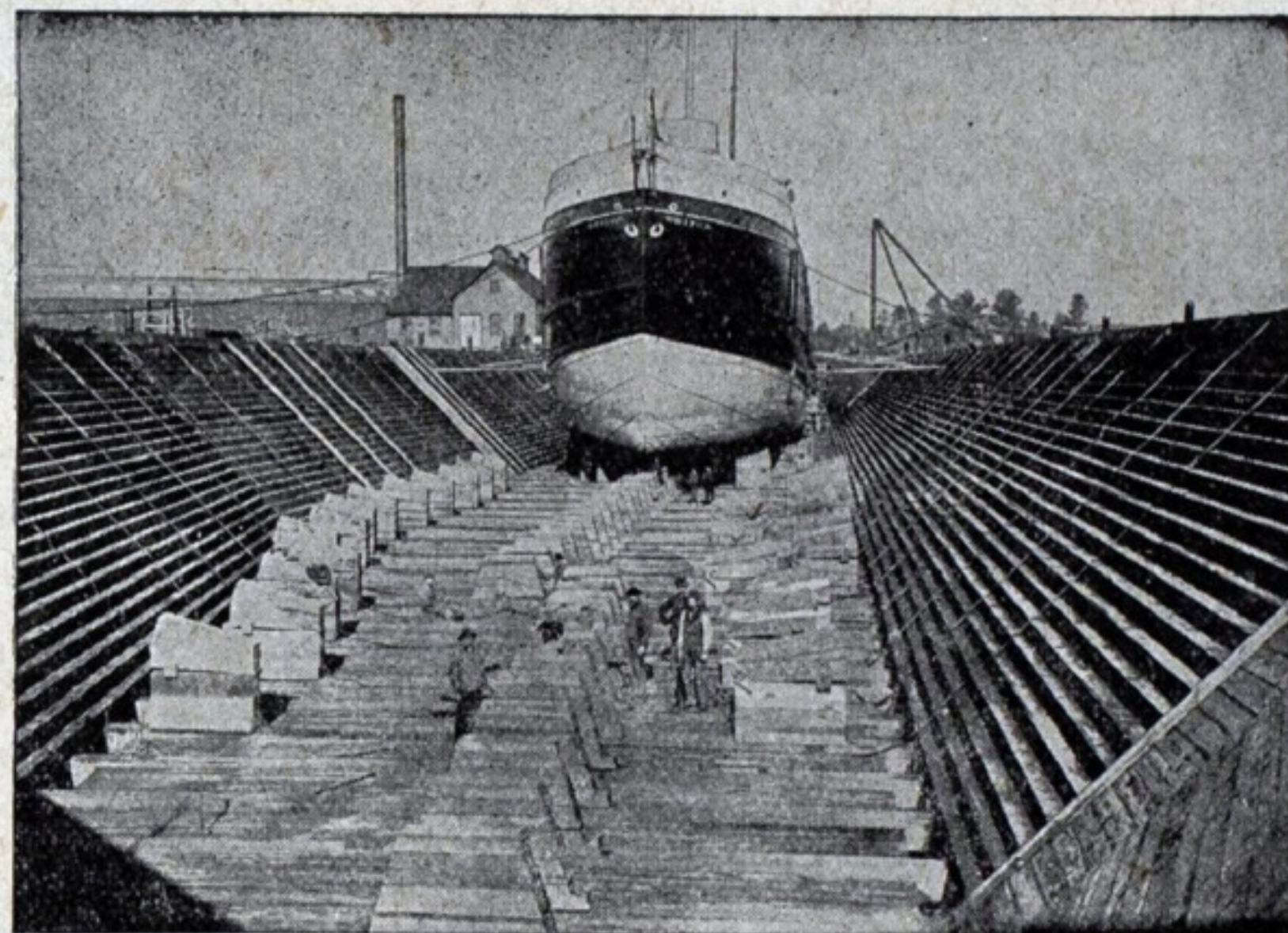
ALL KINDS OF PLEASURE BOATS, FISHING AND HUNTING BOATS,  
SHELLS, BARGES, GIGS AND CANOES.

## Superior Ship Building Co.

### STEEL AND METAL SHIPS

Of all Classes built on shortest possible notice at our yards at  
WEST SUPERIOR, WIS., and also at EVERETT, WASH.

PHOTOGRAPH OF 300-FOOT BOAT IN DOCK.



Plates and  
Material  
always on  
hand to  
repair all  
kinds of  
Metal  
Ships in  
Shortest  
Time.

Best  
Quality of  
Oak in  
Stock  
for  
Repairing  
Wooden  
Vessels  
of all  
Classes.

### SIZE OF DOCK

Length, Extreme.....	587 feet.	Entrance, Top.....	55 feet 9 in.
Breadth, Top.....	90 " 4 in.	Entrance, Bottom.....	50 "
Breadth, Bottom.....	52 "	Depth over Sills.....	18 "

LARGEST DRY-DOCK ON THE LAKES.

Prices for Repairs and Docking  
same as at Lower Lake Ports.

SUPERIOR, WIS.

A Number of Propeller Wheels in Stock at Dry-Dock.

W. S. JENKS, President.

O. L. JENKS, Vice Pres. and Treas.

A. M. CARPENTER, Sec. and Gen'l Mgr.

# The Jenks Ship Building Co.

For Sale or Charter

Steamers H. E. Runnels,  
Linden,  
Black Rock.

Tug W. G. Mason.



**Steel and Wood Ship Builders.**  
**Marine Engines and Boilers.**



Office and Machine Shops  
Fourth Street.

Yards  
Foot of Lincoln Ave.

Port Huron, Mich.

•—STEAM WINDLASSES, CAPSTANS AND STEERING APPARATUS—•